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ABSTRACT

The evaluation of the Project World of Work as implemented in the Contoocook Valley (Con-Val) School District, New Hampshire, uses the term "career education" as a synonym for Industriology, the science of industry, and the focal point of their program. Twelve management objectives of the program are evaluated: desk study, development of goals and objectives, budget, fiscal procedures, evaluation, time sequence chart, job descriptions, information dissemination, needs assessment, inventory of equipment and materials, phase out of activities, and staff development. Three program objectives were examined: industriology, work study/work experience, and vocational guidance. Materials related to the program and to the evaluation are included in eight appendixes. The overall intent of the evaluation was to identify the successful elements of the program as well as the unsuccessful elements. The external evaluation strategy consisted of external monitoring of project activities, multiple on-site visits requiring files audit, classroom visits, and interviews classed into four phases. It was concluded, among other observations, that the numerous changes in project staff had hindered efficient program function. (AG)

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PROJECT WORLD OF WORK

Peterborough, New Hampshire

FINAL REPORT

June, 1973

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INTRODUCTION

Evaluation, today, has become an essential element for the successful management of any project attempting to bring effective change to a system. This has not always been the case, especially in the areas of educational innovation.

For many years educators hypothesized about how the ills of American education could be cured if only the resources were freed up with which to attack the problems. Beginning in the 1960's with the Missile Gap caused by Sputnik and the subsequent questions about the quality of our educational system, millions of dollars in state and federal revenue were pumped into educational innovation. Most of this money was funneled through the National Defense and Elementary and Secondary Education Acts. With the resources now available educators began applying their "cures"--reducing class size, increasing libraries, tutorships, individualization of instruction, etc. Initially, little was done to determine the effect of all these innovations, but eventually it became apparent that a great deal of waste was occurring or at least dollars were not reaping all that had been promised.

Models began to appear to monitor the dollars being spent against what was being produced. For the most part, the older experimental design or quasi-experimental research design was the main tool for accountability. Hindered by

elaborate sampling techniques, controlled and noncontrolled variables, and a reliance on sophisticated statistical analysis, this approach proved too cumbersome and complicated for effective project management. Even the early, more simple evaluation design had at least one major fault shared by the experimental research design; the emphasis was always on project outcome--success or failure--but often without concrete indicators of why a project reached a particular outcome. It wasn't until Robert Stake and Daniel Stufflebeam introduced their models, that evaluation began to reach its potential as a management tool. Through a series of project reports--interim, formative, summative, etc.--feedback mechanisms were developed that highlighted potential project weaknesses while the project was on-going; and recommendations were made for possible modifications, thus increasing the chance for a successful project outcome.

Internal and external evaluation designs were developed. The former primarily for use by the Project Manager and the latter for third-party audit or for focus on specific elements of program functioning. Evaluation then became as critical to program management as PERT, cost accounting, management by objectives, or any other of the sound management techniques.

The evaluation design for Project World of Work consisted basically of three elements:

1) Audit/Evaluation Design (Appendix A).

2) Interim Report (March).

3) Final Report (June).

The Audit/Evaluation Design was an examination of project objectives to determine if they were accessible as stated. If not, they were modified by the project staff and external evaluator, and indicators of whether the objectives were being fulfilled were identified. Project WOW's objectives were divided into two separate categories: Management and Program.

The Interim Report served several purposes:

1) As an indication of how the evaluation was progressing.

2) Feedback for on-going program modification.

3) To assure that the proper program elements were being focused on by the evaluator.

The Interim Report was presented in April, 1973, to Mr. Ray Edwards, Superintendent of Schools, and his administrative staff: Mr. Charles Pieterse, Program Director; Mr. Victor Walton, Project Coordinator; and their staff. Subsequent meetings for feedback and modification were held. Its focus was exclusively on the project management objectives.

The Final Report, presented in June, 1973, incorporates the findings of the Interim Report as well as subsequent findings on Program objectives. A variety of techniques were used in evaluating Project World of Work including

interviews, desk study of previous reports, examination of existing documentation and questionnaires where appropriate.

The purpose of a good evaluation report is not to condemn or accuse but rather to identify those elements of a program that were successful for replication by others and those elements that failed so that others don't have to repeat the same errors. It is with this purpose in mind that this report is presented.

BACKGROUND - PROJECT WORLD OF WORK

In order to clarify potential semantic disparities, it should be noted that "career education" as used by Project World of Work preceded the definitions arrived at by Dr. Sidney Marland and the U.S. Office of Education. In fact, Project WOW's career education was really a means of testing out an alternative approach to Industrial Arts, called Industriology, and focusing on Grades 8-10.

The concept of Industriology is not intended to replace industrial arts as a curriculum but rather to supplement, revise and modify present-day industrial arts programs. Industriology can thus be briefly defined as "the science of industry," with a content reflective of current industrial practices.

As Project WOW developed, Industriology (Grades 7-10) remained its prime focus with supplemental "career education" activities planned on a smaller scale for other grades. Examples of these are the occupational/career information activities in the elementary grades and the work/study, work/experience activities for grades 11 and 12.

The reader should note, however, that the term career education, as it appears in this report, is being used synonymously with Industriology.

A brief explanation of the development of Project WOW was taken from the original grant proposal written by Mr. John Faust in 1969:

Research has shown that the most realistic career choices of people are made by those with the greatest exposure to valid information about work and the greatest opportunity for self-evaluation.

In 1966, Wisconsin State University, Platteville, developed a program named Industriology. This was defined as a study of industry. It defined industry as being of five basic types: raw material, manufacturing, distribution and service to products, service to people. It further determines key activities of industry to be product development, purchasing, manufacturing or processing, industrial relations, internal finance and office services and marketing.

The development of the Con-Val World of Work program in the junior high and early high school program will make use of all study and materials developed in the Industriology program...The World of Work program will also make use of selected research studies in occupational information and guidance...which identify that in addition to Industriology there are other innovations in Industrial Arts Education that may be of significant value in developing the World of Work program... The development of the World of Work concept for the Contoocook Valley Schools will involve three phases: (1) World of Work opportunities in pre-high school (*occupational/career information*);* (2) exploring occupational interests for ability and aptitude in the early high school years (*Industriology*);* (3) developing skills, knowledge and attitudes needed for a chosen occupational field and aiding students in obtaining employment (*work/study-work/experience*).* Currently in New Hampshire, schools offered limited occupational training programs usually only in Grades 11-12...The World of Work program that is being developed for the Contoocook Valley Schools will be an attempt to put occupational meaning into all phases of its education program from junior high school through the job entry vocational program... The retraining of teachers for activity oriented teaching approaches to the World of Work opportunities, the use of multi-media equipment, the involvement of local businesses, industries and social agencies as an extension of public education, and the full involvement of vocational guidance services will put meaning into the Contoocook Valley School Districts occupational training program.

*Italic, evaluator's addition.

COMMENTS ON THE EVALUATION REPORT FORMAT

The evaluator has attempted to keep the report brief and uncluttered. A section has been included giving a brief overall background to Project World of Work for the reader. Project objectives were divided into two general areas: Management and Program. Each objective was stated, followed by a summary of the activities necessary for successful completion of the objective and, finally, a series of evaluative comments on the status of the objective.

The program objectives were divided into industriology, work study/work experience, and vocational guidance. Each area was dealt with exactly as the Management portion had been. A Summary of Findings and Recommendations was included for those seeking a general overview rather than the detail of the report.

The Appendix has been kept to a minimum since this report will become a portion of a more extensive Final Project Report for USOE with a complete appendix.

MANAGEMENT OBJECTIVES

One of the major outcomes of preliminary conferences held between Project WOW personnel and members of the external evaluation team was a decision to conduct an internal formative evaluation of the project's first two years of operation. The intent was to gain some general insight into how the program had functioned previously and to establish for both the evaluator and WOW personnel a common point of departure for FY72 operations.

Objective I, then, for FY72 was to complete an in-depth desk study, supported by interviews to be conducted by the Project Coordinator, to assess not only the historical perspectives of the project but, most important, to provide the necessary baseline data that would allow for any subsequent possible modification of objectives for the termination phase of the project.

A synthesis was made of available data and information accumulated in project files together with the interviews conducted by the Coordinator. In his report to the district on the status of the project in the Fall of 1972, the Coordinator noted that the project appeared to have been hampered by several conditions that would have significant influence on project objectives for FY72. Although this document was developed shortly after the Project Coordinator assumed his position and many problems cited in the report were later

clarified as having been corrected, some mention of general findings seems appropriate.

Project Status in the Fall (FY72) - General Findings. Some general findings of the internal formative evaluation are presented below since they clearly reflect the status of the project at the onset of the final year of activity.

Needs Assessment. According to the first director of project, an initial thorough needs assessment was not conducted as a preliminary step in developing the program. There also did not appear to be any documentation in evidence of any continuing needs assessment being conducted in FY70 or FY71.

Project Staff. Since the project began in the Fall of 1970, the project has had two directors, three project coordinators, two resource teachers, and a number of changes in other categories of personnel. The variation in administrative style caused by such staff changes creates problems regarding consistency of project management. In addition, although the fundamental goals and objectives of the project continued to emphasize Industriology, the process for attaining these goals varied with the philosophy and strategy of each new key staff member.

Evaluation. During FY70 an external evaluation committee was developed, and while an evaluation of the first year of project activity was conducted, the results of that evaluation were not documented in the form of a formal report to the project staff or the school district. In FY71, the external evaluation was contracted to EPIC. As a beginning step of their contract, new performance objectives were written for both process and product outcomes and subsequently evaluated. EPIC did present an oral briefing of its findings on October 11, but the final report (dated September, 1972) was not received for examination, dissemination and decision on possible project modification by the project staff until late March, 1973. In both FY70 and FY71 the U.S. Office of Education/Career Education Division did send a team to evaluate the project and both the EPIC and USOE reports are on file. A series of monthly status reports, as required by USOE, were used to provide internal project monitoring.

Dissemination. Evidence was found that, in both the first and second years, attempts were made to develop material that would be of value to consumers. In FY70, the so-called "brown book" was developed consisting of a variety of curriculum materials that could be used for instituting career education programs at a number of grade levels. In the second year of the project, several news articles were produced as well as a formal news letter, video slides prepared (although not structured into a formal presentation format or package), and an excellent article regarding Project WOW was published in the Christian Science Monitor. Dissemination via a resume of activities and accomplishments was prepared at several points in time and available upon request. WOW was also listed in ERIC and other professional and nonprofessional publications. In the case of most innovative projects, the first two years do not normally consist of large dissemination/replication efforts. This was time of the WOW project with the third year of project operation emphasizing publicity and dissemination.

Advisory and Executive Boards. In the first year of project activity, an Evaluation Committee was developed and in FY71 an ad hoc group was organized with the intent of forwarding to the Evaluation Committee inputs relating to the operation of the project. Neither of these groups was successful in fulfilling the intent for which they were formed. In short, no formal mechanism existed for feedback from the school and community to the project staff. In general, decision-making had been conducted internally by the project staff, together with the administration of the supervisory union.

Inventory. In both FY70 and FY71, initial attempts were made to account for materials, supplies, and equipment. During the second year of the project, the project director did request such a list from the project coordinator and this activity was initiated by Gladys Nielsen, ConVal IMC Director. A list of equipment and materials was developed from purchase orders listing item names and cost, but this list did not include serial numbers. This list was added to and up-dated for FY73. With this material in constant circulation, it is often difficult to pinpoint a specific item's location; however, all equipment has now been located and most of the software packages. Ms. Nielsen and IMC personnel will continue to add to and refine this inventory and replace missing or worn pages indicating materials purchased during Project WOW's operation.

Fiscal Controls. In each project year the director and coordinator had been asked to create an ex-post-facto- line-item budget for the succeeding year of operation using the State of New Hampshire's accounting system format. Problems in fiscal management are due to arise in projects of this type from several sources:

1. School districts are governed by strict statutory regulations relating to the expenditure of funds, and it is a reality of life that innovative projects, regardless of intent, must function according to these same regulations.

2. Turnover in key project staff members necessarily requires their replacements to re-examine the project's internal accounting procedures, familiarize themselves with it, adjust line items, etc.--a process that is time-consuming and often frustrating for project staff and central accounting offices as well.

3. Shifts in state/federal accounting procedures are felt throughout the system as was the case in FY72-73 when the state of New Hampshire adopted a new state-wide accounting system.

Project Administrative Organization. The ultimate decisions regarding the functioning of Project WOW rest with the central administration of the school district due to both legal responsibility and the necessity to provide programs consistent with the total educational philosophy of the district. The prime responsibilities for the operational dimensions of the project were shared between the project director and project coordinator with the Assistant Superintendent of Schools acting as the linkage between the project and central administrative staff.

Linkages with Consumers. While key personnel changes occurred on an almost on-going basis, consumer school staffs also changed dramatically. This process was so "complete" that in both 1971 and in the Fall of 1972, there were few personnel in the district who could accurately orient new Project WOW or school staffs to the history of the project. The destruction of a school by fire in December of 1970 severely hindered the smooth

integration of program elements within the district curriculum, not to mention the shattering of communications between consumer personnel. The problems of moving salvaged equipment and materials, rescheduling program activities, etc., caused a severe interruption of program and project objectives.

Goals and Objectives for FY 1972. Based on the outcomes of the desk study and interviews conducted by the Project Coordinator, a major revision of priorities for FY 1972 resulted in the development of what the current staff felt were realistic goals and objectives for the termination phase of the project. The goals and objectives were classed into four major groupings: (1) Management Objectives, (2) Program Objectives - Industriology, (3) Program Objectives - Work-Experience and Work-Study, and (4) Program Objectives - Vocational Guidance.

The goals, objectives, tasks and activities encompassed under each of the classifications were finalized by the project staff by April 1, 1973 (although the management objectives were available in draft form by November-March, 1973). The management/program strategy is detailed in World of Work: Goals and Objectives (March, 1973) and included as Appendix A.

External Evaluation (FY 1972). Subsequent to the finalization of project management objectives for the third and final year of Project WOW, the evaluator developed specifications for the external evaluation model to be used during the final year of the project.

In brief, the evaluation model reflects the Work Statement governing the contractual agreement between Project WOW and the evaluation agency. Most important, however, the resulting design and implementation strategy take into consideration the results of conferences held between the evaluation team and project staff regarding the necessity to reorder project priorities for the termination year of effort. A generalized Context, Input, Process and Product (CIPP) Model was selected since it provided the most flexibility to on-going internal, as well as external, evaluation activities.

An on-going internal evaluation strategy was implemented by Project WOW staff with the Project Coordinator serving as the primary evaluator. All correspondence, reports, memoranda, newsletters, and the like, were also forwarded to the external evaluation team for its assessment.

The external evaluation strategy consisted of external monitoring of project activities (based on internal evaluation documentation noted above), multiple on-site visits requiring files audit, classroom visits, and interviews with all levels of project participation. It should be noted, however, that external evaluation activities were classed into four phases.

The phased approach was viewed as both necessary and appropriate since a significant degree of project effort during the initial months of FY72 had to be devoted to formative

evaluation activities, orientation of new project staff and client groups to the goals of Project WOW, and development of specific goals and objectives for the final year of operation.

Moreover, management objectives were "isolated" in an operational sense from program objectives because of the critical need to "get the house in order" prior to the focusing of all available efforts toward program implementation. In this regard it should be noted that program objectives were not to be evaluated in an in-depth manner until May-June, 1973, at which time products of the final project year were assessed. However, external monitoring of emerging program activities and associated products were provided on a continuous basis throughout FY72.

The resulting evaluation strategy is best illustrated in Appendix A. Phases I-III were evaluated prior to April 1, 1973, and the findings reported in the Interim Report. Phase IV activities were concluded in June, 1973, and assessments of its effectiveness reported in the Final Evaluation Report scheduled for June 29,1973.

MANAGEMENT OBJECTIVE II - DEVELOPMENT OF GOALS AND OBJECTIVES

Objective. *By November 1, 1972, the project staff, in coordination with the evaluator, will have formulated measurable performance objectives for management and program components of WOW for FY 1972.*

Summary of Prescribed Activities. The evaluation team and the Project Coordinator were to review and modify existing project objectives, and to meet with program component directors to develop objectives specific to their activities.

Evaluation. The development of objectives and activities for FY72 was not met on schedule due primarily to the need to reassess the thrust of project efforts for the final year of operation which led to subsequent modification of objectives. Several meetings were held between the evaluation team and project staff to attempt to identify and specify realistic objectives for the final year of project operation.

Management objectives were available in draft form by the prescribed deadline, and a final draft of program objectives for the industriology component were available by November 27, 1972. Guidelines for the work experience/work study/commonalities component and the vocational guidance component were not available until early 1973. In this latter regard, the major problem in developing objectives for these components was that these areas function only partially under the direction of the Project WOW Director with substantial overlap into normal educational program activities, thus

making the distinction of where lines of responsibility begin and end difficult. This observation by the evaluation team applies to administrative as well as operational structures resulting in nebulous lines of communication and role definition between these divisions and the project. By early 1973 it became apparent that the coordinator would be required to specify objectives and activities for these areas.

Finally, while draft versions of the total goals and objectives document were available to the staff in the Fall of 1972, the final document, acceptable to both the project staff and the external evaluators, did not become available until March, 1973. It should be noted, however, that component segments were accepted as early as November (i.e., management and industriology program). Copy of the final Goals and Objectives for FY72 is attached as Appendix A to this report.

MANAGEMENT OBJECTIVE III - BUDGET

Objective. *By November 8, 1972, the project staff, representatives of the school district administration, and a federal representative from USOE shall have established a revised budget that will be consistent with stated WOW goals and objectives for FY 1972.*

Summary of Prescribed Activities. Based on the outcomes of the desk study conducted under Management Objective I, the Project Coordinator reviewed budget specifications for FY 1971 and FY 1972 to identify any administrative or operational constraints upon the project as a result of existing budgets and to make recommendations for plausible revisions for FY72. Subsequent to reaching agreement with the district administration regarding proposed revisions, the coordinator was to submit the revised budget for FY72 to USOE for its review and approval. Finally, the Project Coordinator was to develop a process for periodic review of the FY72 budget on an "obligation/expenditure" basis.

Evaluation. This objective was accomplished with the district administration approving and authorizing budget modifications for elements of Project WOW's program.

The Revised Budget for Project WOW operations for FY72 was finally documented and approved on January 17, 1973, nearly two months after the target date specified for the accomplishment of Management Objective III.

In summary, documented revisions proposed by the coordinator shifted monies to more realistically meet the needs of the project during FY72. Also, the fiscal accountability system of the school district was used as well as a

separate but correlated project budget system. In the latter case, the WOW internal budget system focused upon a monitoring system based on an on-going assessment of "obligated versus expended" funds on a week-by-week basis. This system facilitated close internal monitoring of the project's fiscal commitments, yet allowed the necessary flexibility to respond to its needs on a dynamic mode.

Several positive comments were received by the project staff from USOE officials regarding the project's new fiscal monitoring procedures which speaks well of the staff and central office efforts in this area.

The USOE representative from DHEW Region I (Boston) was also fully knowledgeable and aware of the historical problems faced by changing WOW administrative staffs and was most supportive of the project's efforts to revise its fiscal commitments for FY72. The project officer at USOE (Washington) was also supportive of these efforts.

MANAGEMENT OBJECTIVE IV - FISCAL PROCEDURES

Objective. *By November 30, 1972, the coordinator, appropriate staff, and representatives of the school district administration shall have conducted a review of the district's fiscal procedures as they relate to the conduct of externally-funded innovative programs.*

Summary of Prescribed Activities. Based on the outcomes of the desk study conducted under Management Objective I regarding fiscal controls as reported in the Project Status Reports (see Interim Report, p. 8), the Project Coordinator was to prepare an outline of any district/project fiscal procedures inhibiting the efficient operation of WOW and to prepare recommendations for improvement.

Evaluation. This objective has been dealt with to some extent under Management Objective III - Budget. Although procedures for improving fiscal management of innovative projects can be and were recommended, district procedures for the management of the entire school district take precedence, with Project WOW being only one position of the whole.

In early October/November, key project staff submitted a joint proposal to the central office regarding additional clerical and bookkeeping assistance. This resulted in the hiring of a secretary for the project director and students to assist the project coordinator.

MANAGEMENT OBJECTIVE V - EVALUATION

Objective. *By November 15, 1972, the Project Coordinator shall receive from the external evaluator a design, strategy and time sequence of evaluation activities that will result in an interim and final report that will clearly show levels of achievement in meeting stated objectives and shall contain recommendations for future planning.*

Summary of Prescribed Activities. The external evaluator was to prepare an audit evaluation design and contract including time/task PERT chart, payment schedule, and any other technical design data required by WOW project coordinator and/or federal representatives. (See Appendix B).

Evaluation. The external evaluator--Unco, Inc., Washington, D.C. (and its Northeast Programs Office at Rye, New Hampshire)--prepared a master copy of the Contract for Services and submitted the document to Project WOW administrators and the school district on October 31, 1973. The master contract included the Specification of Services, a detailed Work Statement and Budget incorporating modified conditions required by WOW and the Government emerging from project orientation conferences held on October 12, 1972. A Payment Schedule was also included in the contract providing for three payments keyed to the completion of Phases I and II, Phase III and Phase IV of the audit evaluation design.

Three conditions were listed in Section VI of the master contract. These addenda were necessary to facilitate

enactment of the evaluation effort while required reviews by the district administration and the federal authorities were undertaken. Of special note, however, is that the master contract did not include a task/time schedule since the finalization of this guideline document necessarily awaited completion of project orientation activities as well as the development of goals and objectives for FY 1972. Final copy of the task/time schedule was submitted to Project WOW in late November, 1972, although the master contract had indicated estimated mandays committed to proposed evaluative efforts. [A copy of the final task/time schedule submitted to the Project Director in early December, 1972, for review and approval by project administrators has been returned to Unco and accepted].

As a final note, questions raised by USOE (Washington) regarding the contract were discussed in February-March, 1973. These issues included such routine items as the omission of the USOE Grant Number from the contract, and so on. These matters were referred by the evaluation team to Unco's business Office at its Washington, D.C. headquarters. No major problems resulted in resolving modifications to the contract.

MANAGEMENT OBJECTIVE VI - TIME SEQUENCE CHART

Objective. *By November 22, 1972, the Project Coordinator shall have prepared a time sequence chart for management and program operation respectively.*

Summary of Prescribed Activities. Time sequence charts for management and program objectives/activities were to be developed and posted. The chart was to include identification of objectives and activities indicating time and resource requirements/commitments for FY 1972. These graphical records were to be used at project staff meetings for status briefings on the project and to provide better definition of personnel roles and responsibilities.

Evaluation. Time sequence charts were under development in October, 1972, for the management segment of the project and, shortly thereafter, for the Industriology Program component. As management and program objectives and activities were finalized, these elements were included on the chart. The chart includes a time-based presentation of objectives and activities consistent with the Goals and Objectives document as well as specifying outreach, seminar/workshop/training schedules both internal and external to the project. The chart also detailed scheduled dissemination activities (e.g., newsletter releases, quarterly reports, radio broadcasts, etc.) and operational targets for instructional packets associated with program goals in Industriology.

As of mid-March, 1973, the time sequence chart for management and industriology program components was complete and posted. Project staff have not, however, included a chart for program components and activities related to either work study/work experience or vocational guidance.

Informal staff meetings have been held to discuss the status and progress of Project WOW based on the charts. In addition, periodic memoranda and newsletter releases to project consumers and administrators have been used to transmit time-based events and activities to both school administrators and personnel as well as the public. [See Management Objective VIII for evaluation of dissemination activities.]

Prior to the inception of Project World of Work, there were no positons for a Vocational Guidance Director and a Coordinator of Cooperative Education. Local funding is now available to continue both of these activities. Mr. Robert McQuillan, Coordinator of Cooperative Education, has been in that position for one year and is highly "student interest-centered" in his approach; Mr. Ed Farhm, Vocational Guidance, is one of two counselors in the ConVal school. These positions are shared jointly by Project WOW and the ConVal school. Because of the personalities involved, no serious communication problems or role/responsibilities have arisen between these positions, Project WOW and the needs of the ConVal school. However, if this element of the project were to be replicated elsewhere, the evaluator suggests that clearly defined roles/

responsibilities and lines of authority be established for each of these positions in relation to their various project and school functions.

MANAGEMENT OBJECTIVE VII - JOB DESCRIPTIONS

Objective. *Job descriptions will be prepared for each position funded by Project WOW so that all staff members will have a clear understanding of their functions and roles relative to the program.* [Target date for attainment of this objective was not specified in the Goals and Objectives document (Evaluators).]

Summary of Prescribed Activities. The Project Coordinator was to prepare a one or two page abstract of job descriptions for each funded project position. Copies of such abstracts were to be available on file in the coordinator's office.

Evaluation. This task has been underway for some time and has resulted in either new or revised abstracts on all project funded positions. (See Appendix C.) If this activity were undertaken earlier, it might have provided the necessary stimulus to integrate staff roles and responsibilities for FY72, particularly with regard to the roles and responsibilities of the eight types of positions funded under the FY72 budget as well as the roles and responsibilities of part-time and volunteer personnel involved in the vocational guidance/work experience programs of the district. Job descriptions did exist in the previous years of WOW's operation and these were revised and updated to correspond to FY73 project objectives.

MANAGEMENT OBJECTIVE VIII - DISSEMINATION

Objective. *By November 20, 1972, the Project Coordinator will have prepared a dissemination strategy/design that will result in the proper dissemination and diffusion of promising Project WOW practices to local, state, and national target audiences.*

Summary of Prescribed Activities. The Project Coordinator was to prepare a list of target dissemination groups and individuals on a local, state and national basis. Four newsletters were to be prepared and distributed to various public audiences. A third major activity called for the development of a method of recording feedback from target audiences to assess increased awareness and interest in the products and processes of the project.

Evaluation. Eight major target dissemination groups were identified for receipt of on-going information regarding WOW activities: (a) the ConVal Regional School Board, (b) various civic clubs and organizations in the greater Peterborough (N.H.) area, (c) vocational education and career education staff of member schools in the supervisory district, (d) staff development committees of selected district schools, (e) listings in the ConVal School District Administration Directory, (f) the New Hampshire State Department of Education, (g) the USOE offices in Region I (Boston) and Washington, D. C., and (h) various media (radio, newspapers, etc.). These audiences were listed on a project "mailing list" for receipt of most public information communications from WOW.

Several issues of the World of Work Newsletter have been prepared and released to target audiences and to supplementary agencies, institutions, groups or individuals who had expressed interest in the project. Copy of the Newsletter distributed in March, 1973, is attached as Appendix D. [Examination of the Newsletter clearly indicates the wide range of program offerings and activities emanating from Project World of Work.]

Feedback from target audiences and other recipients of WOW informational releases has been accomplished on an informal basis. To date, the Project WOW office has received approximately 250 letters for information and materials regarding the project, including an abstract of the project itself, copies of the newsletters, and examination copies of the learning packets being developed as a segment of the Industriology Program component of WOW. A notebook of WOW publications and releases is maintained in the project office. Local newspapers have reprinted the Newsletter or segments thereof for their own audiences.

In general, the Newsletter is released on a monthly basis. Distribution of key target audiences is accomplished by mail while dissemination to hospitals, professional groups and offices, restaurants, etc., is done personally. The Project WOW staff has also distributed copies of the Newsletter at several local, regional, state and national conferences attended by the staff; and copies have also been distributed

at workshops and other events where staff members have been participants or speakers. Preparation and distribution of dissemination materials is accomplished against the time-sequence chart examined and assessed under Management Objective VI.

MANAGEMENT OBJECTIVE IX - NEEDS ASSESSMENT

Objective. *By December 15, 1972, the Project Coordinator, with technical assistance from the project evaluators, shall have prepared a design, strategy and sequential activities for the conduct of an "on-going" needs assessment.*

Summary of Prescribed Activities. Activities to be undertaken for FY72 included review and assessments of existing needs assessment activities and products and, if necessary, the design, development and administration of a FY72 needs assessment to provide data for determining future program needs.

Evaluation. Given the time and energy commitments required for the accomplishment of several other management objectives judged to be of major significance for FY72 project operations, this objective was not formally addressed in FY72. However, the Quarterly Reports submitted to the USOE, the Interim, and Final Reports submitted by the external evaluators, and the findings of the on-going internal evaluation system of the project will serve as an informal source of identifying needs in career education in the district.

MANAGEMENT OBJECTIVE X - INVENTORY

Objective. *By December 15, 1972, the project staff shall have inventoried all the equipment and materials accumulated from July, 1970, by Project WOW.*

Summary of Prescribed Activities. A process was to be established for recataloging all items in a manner consistent with other district projects and media/instructional centers. This activity was to be conducted in conjunction with "phase-out" plans for Project WOW, the ConVal Regional High School Instructional Materials Center, Project ConVal, and school district and USOE regulations. A correlative activity (to be accomplished by March 15, 1973) called for the acquisition of all clearances, contracted personnel and finalization of the process to accomplish the task by June 1, 1973.

Evaluation. Documentation of project materials and equipment is available from purchase order forms and has been listed by item and cost. Mr. Matthew Cardoza, Project Officer, has reviewed and approved the list. Efforts to undertake a complete inventory of Project WOW resources in collaboration with the IMC and Project ConVal (an ESEA Title III media project) have been completed with the IMC serving as the central clearinghouse for this activity. While the existing IMC mainly serves ConVal Regional High School, the school district has been pressing for a district-wide instructional materials center to act as a central resource center responsible for the distribution, control and inventory of all such materials; and

the evaluator lends his support to the central administration's position on this matter. As Project WOW has served nine communities within the district (i.e., Antrim, Bennington, Dublin, Francestown, Greenfield, Hancock, Peterborough, Sharon, and Temple), the final plan for phase-out must consider resource distribution, retrieval and inventory on a district-wide basis to ensure consumers access to products emerging from WOW. Such a proposed resource center could fulfill this need.

As of March 15, 1973, a procedural system for inventory control had not been accomplished by the Project WOW staff. It had been thought that an existing control system would be capable of handling this task, but careful assessment of this system suggested that a new process would be required.

Since Project WOW is one of the first World of Work projects to be phased out, certain procedural questions, such as dispersion of equipment and materials, have not been answered by the Federal government to date. Mr. Cardoza, Project Officer, has once again rendered considerable assistance in an attempt to resolve such issues, but it appears they will linger well beyond project termination on June 30.

MANAGEMENT OBJECTIVE XI - PHASE-OUT

Objective. *By January 10, 1973, the Project Coordinator, in cooperation with representatives of the school district administration and USOE, shall have prepared a design, strategy and check-list of activities for termination of Project World of Work on June 30, 1973.*

Summary of Prescribed Activities. A series of meetings was held to outline milestones in the phase-out process and to develop a design and check-list for related activities. Three additional time-based activities were scheduled for enactment to complete the phase-out process (see Goals and Objectives, Appendix A), only one of which was scheduled for completion prior to April 1, 1973 (i.e., collection of a significant portion of relevant data required for phase-out activities).

Evaluation. The initial informal, fact-finding meeting for discussion of phase-out procedures and requirements was held February 21, 1973. The project was represented by the Director, Coordinator and Resource Teacher. The district administration was represented by the Assistant Superintendent and Bookkeeper/Accountant, and the USOE by its Field Officer out of Region I (Boston). A subsequent meeting with the Field Officer was held on June 12 for final Phase-Out plans.

Collection of data and information required to facilitate close-out procedures is being coordinated by the Project Coordinator with assistance from the project staff. A "significant portion of relevant data necessary for project phase-out" had not been collected and synthesized by the March 15,

1973, deadline. However, required data and information was accumulated and synthesized by the prescribed May 7, 1973, target date. Administrative negotiations between the district and USOE against a June 7, 1973, completion of required activities were conducted to the apparent satisfaction of the Project Officer as of June 12, 1973.

MANAGEMENT OBJECTIVE XII - STAFF DEVELOPMENT

Objective. *By February 15, 1973, the project staff and selected school district personnel will receive training and experience through in-service workshops, conferences and other means of input related to vocational and career education.*

Summary of Prescribed Activities. Conferences related to vocational and career education, decision-making and evaluation/dissemination were to be attended by staff and district personnel. In addition, a series of workshops in wood craft were to be sponsored by Project WOW for classroom teachers. The purpose of these and related activities was to convey participant awareness and interest in the current status of vocational and career education in the state, the region, and nationally in an effort to promote awareness and interest within the district.

Evaluation. Several state, regional and national conferences have been attended by the project staff. Among these were the National Conference on Career Education (Washington, D.C.), the National Coordinators Conference for Career Education (Warrenton, Virginia), the Regional Directors Conference for New England (Pawtucket, Rhode Island), the Southern New Hampshire Staff Development Conference on Career Education (Concord, New Hampshire), the New England Industrial Arts and Career Education Convention (Bedford, New Hampshire), a Career Education Program at Pawtucket, Rhode Island, and a similar program at Syracuse, New York.

These conferences were not only attended by representatives of the project staff (all levels), but also by principals and teachers within the district (i.e., Pawtucket, Concord, and Syracuse). Additional conferences will be attended by district personnel between April and June of 1973. A total of at least eighteen staff and district personnel have been represented at these conferences to date.

Workshops and programs on career and vocational education have been offered to district personnel including administrators, principals and teachers and were an obvious plus for Project WOW and the district.

As a final observation, several district personnel, including administrative as well as instructional personnel, suggested to the evaluators that Project WOW had taken hold in FY72. Some even felt that the principals and teachers would be sufficiently knowledgeable as well as interested in carrying on the programs being offered by the project staff after WOW has officially terminated its activities in June of 1973. As one teacher noted, "We no longer go to WOW only for money for field trips (although field trips remain an important segment of the program). We are involved in workshops and in developing instructional packets for use in our classrooms this year as well as in the future."

PROGRAM OBJECTIVE I - INDUSTRIOLOGY

Objective: *By November 24, 1972, the Program Consultant will develop in writing a series of goals on the 7th grade Industriology Program.*

Summary of Prescribed Activities. The Program Consultant was to develop a program design with objectives for "The Study of Industry" program for Grade 7. This program was to include instructional components in (a) history and development of industry, (b) functions and implications of industry, and (c) internal organization of industry. A program design with objectives was also supposed to be developed for the elements on classifications of industry including (a) Raw Materials, (b) Manufacturing, (c) Distribution, and (d) Service.

Evaluation. The goals developed for the 7th Grade Industriology Program were a modification and expansion of those developed initially from the University of Wisconsin's concepts of industriology. Project WOW's general goals for industriology include:

- To develop in each student an awareness and understanding of the development of industry and its social and moral obligations on society.
- To develop an awareness within each student of one's role as a wage earner in today's society.
- To expand each student's self-confidence by having each student work in areas requiring responsibilities.
- To develop within the student an awareness and the ability to distinguish quality of products.

- To create a situation where student's work necessitates the need for joint cooperation and communication.
- To develop business experience and business contacts by controlling and operating their own company.
- To develop student awareness of job opportunities within the defined unit of study.

In the evaluator's opinion these goals go well beyond those stated by the University of Wisconsin in terms of their comprehensiveness and relation to total industriology concept. As will be stated later in this report, this is also the case with specific industriology units developed by WOW as compared to those developed by the University of Wisconsin. A complete organization chart for the "Study of Industry" Program can be found in Appendix E.

The Study of Industry was done in terms of activities of industry (history and development, functions and implications, and internal organization). This was completed only in the Home Economics/Industriology Project. John Davy, Program Consultant and Ms. Loretta Grace, Home Economics teacher at Peterborough-Antrim Middle Schools, collaborated in the development of project objectives and activities related to several areas of industriology--i.e., raw materials, distribution, manufacturing, etc. The following is an explanation of the project from the WOW Newsletter (June):

> Two competing companies were organized to develop companies relating to the Food Services Industry. "A Team" home economics students called their company, "Grannie's Grinder Gallery" and "B Team" formed,

"Serve-A-Sub Company." Each group conducted an election campaign to determine its officers. The officers of "Grannie's Grinder Gallery" company were: President, Gwen Hampson; Vice President of Manufacturing, Erika Beecher; Vice President of Sales, Kelly Rathbun; Corporate Secretary, Sarah Franklin and Treasurer, Danette Donovan. "Serve-A-Sub Company" elected: President, Keley Brooks; Vice President of Manufacturing, Cindy Ingalls; Vice President of Sales, Kim Kolb; Corporate Secretary, Gloria Lodge and Treasurer, Sarah Woodward.

Following the elections, the company held meetings to discuss the many matters relating to the organization of their companies such as the selling of stock in order to get working capital. Shares were then sold to friends, parents and teachers for $1.00. After the sale of stock, the resulting capital was used to purchase the necessary supplies and ingredients to produce the product.

The student body was then polled to find out the kind of grinders "consumers" preferred. Roast beef was the favorite and ham followed a close second.

An advertising campaign was then conducted. The PMS bulletin boards were decorated with poster commercials intended to persuade consumers to "Bring your money, May 16 and buy a Ham Grinder for 55¢ or a roast beef grinder for 65¢."

A production line was then set up and the girls produced 96 roast beef grinders and 111 ham grinders in short order.

The result? ... All 207 grinders were sold on Wednesday, May 16, and after reviewing their bookkeeping, the officers were pleased to announce that on 95 shares of stock they would be able to pay a dividend of a whopping 40¢ per share.

Although only one such project was developed, it was done in such a comprehensive manner and met with so much success that it should easily serve as a model for subsequent efforts by teachers in other "Study of Industry" projects.

Specific objectives were not developed for each of the four program elements on classification of industry (raw materials,

manufacturing, distribution and service). They do exist, however, for each industriology unit separately such as paper making, leather craft, and home economics as well as for partially developed units in aerospace, metals and graphics.

PROGRAM OBJECTIVE - INDUSTRIOLOGY AWARENESS

Objective. *By April 10, 1973, all Industrial Arts, Home Economics staff and selected administrators, departmental chairmen and other staff will develop an awareness of an interest in the Industriology Program.*

Summary of Prescribed Activities. The Program Consultant was to distribute copies of written program components to each Industrial Arts and Home Economics staff member, administrator and department heads. Project WOW's Coordinator and Program Consultant were to hold a series of department meetings on the development of the industriology program with faculty, administration and department heads.

Evaluation. This objective was achieved. Written program components were distributed to all industrial arts/home economics staff, administrators, etc. These packages also contained an Outline of Program, Program Goals and an Explanation of Industriology. In subsequent interviews with the external evaluator, selected members of this objective's audiences not only expressed an understanding of industriology as an alternative, but also a commitment to the implementation of the concept within the district.

Only one formal departmental meeting was held (November 7) and no minutes were kept. Weekly Monday and Friday meetings were held between the district's Industrial Arts staff and WOW's Program Consultant and Coordinator.

PROGRAM OBJECTIVE - INDUSTRIOLOGY PROGRAM DEVELOPMENT

Objective. *By January 28, 1973, the program consultant will, in collaboration with three selected Industrial Arts teachers and two selected Home Economics teachers, develop a learning activity packet on the history and development of industry.*

Summary of Prescribed Activities. For this objective to be completed a learning packet entitled "History and Development of Industry" which included a) performance objectives, b) unit outline, c) student activities, d) teacher preparation, e) resources, f) time schedules and g) list of supply needs. The Program Consultant, in collaboration with three selected Industrial Arts teachers,was to develop programs for each of the four classifications of industry containing the criteria cited above.

Evaluation. The development of a learning packet in "History and Development of Industry" is misleading. It seems to suggest a focus on the historical change taking place in industry over the years. If this is so, then this particular objective was not met. The Program Consultant suggests that elements of industrial history and development were included in the Home Economics package in conducting such activities as:

assembly line procedures, food storage techniques, sanitation, quality control, and safety.

This may be stretching the point some, and subsequently, this objective should have been more explicit in terms of what were the outcome expectations.

Complete packets were developed by the Program Consultant, two Home Economics teachers and three Industrial Arts teachers in the areas of: paper making, leather craft, and home economics.

Partial packets were developed for aerospace, metals and graphics. Some of the packets were developed on an individual basis while others involved several people working cooperatively. One problem appeared to be coordinating time schedules of those teachers who participated, and this may have contributed to more individual effort. All participants involved did meet on Monday and/or Friday to critique each others work to date. This effort produced some of the most impressive products of the industriology component of WOW. Comments made by teachers/administrators interviewed by the evaluator as well as his own subjective opinion based on review of other learning packets of this type indicate that the Program Consultant and teachers involved in this effort deserve special praise. The packets are complete (objectives, unit outline, activities, resources, etc.), containing everything any teacher would need to conduct an effective lesson. Building administrators said their teachers were making a great deal of use of most of the packets and had only positive

comments regarding the packets. As evaluator, I cannot emphasize enough the high quality of the packets that have been developed and encourage the reader to obtain copies from Project World of Work.

PROGRAM OBJECTIVE - INDUSTRIOLOGY-ELEMENTARY PROGRAM

Objective. *By June 1, 1973, elementary administrators and teachers will develop an understanding of career education and its relationship to elementary classes.*

Summary of Prescribed Activities. The purpose of this objective was primarily to develop an information program on career education at the elementary level. The WOW Project Coordinator, Program Consultant and Guidance Counselor were to distribute a variety of publications and program materials as well as develop a list of available career education materials for all elementary teachers. A weekly series of workshops beginning in November on project planning, use of tools/materials was available to all elementary staff.

Evaluation. A variety of approaches was used in an attempt to meet this objective. The primary emphasis of Project World of Work was on the concept of industriology for students in Grades 7-10, but to provide continuity, it was necessary to begin to build an awareness of vocational/career education at the elementary levels.

A Resource Guide was prepared and distributed to all principals and contained a philosophy of occupational/career education; teacher/student activities; and a bibliography.

The principals also received copies of the "Yellow Pages of Learning" published by the Group for Environmental Education, Inc., which provided various career information. A list of all occupational/career education audio-visual materials at Project WOW and in the ConVal guidance office were distributed to all teachers and principals. Beginning in September the Program Consultant made a presentation regarding Project WOW to every school in the district and provided them with a WOW Notebook detailing various aspects of the project. Tapes were also developed for a radio presentation on "An Explanation of Career Education." In addition, the Program Consultant and Project Coordinator made periodic on-site visits to various schools and produced a World of Work Newsletter.

Between November 7 and March 21, weekly workshops were provided by Mr. Ed Gienty for teachers in area elementary/middle schools. Although primarily focused on woodworking, these workshops attempted to provide manipulative experiences that teachers might encounter while working with elementary pupils, selection and purchase of materials, and the use of tools.

PROGRAM OBJECTIVE - FIELD TRIPS

Objective. *A series of field trips related to career/vocational education will be sponsored and supported by Project WOW.*

Summary of Prescribed Activities. The Program Consultant was to develop and distribute to each principal a WOW philosophy on field trips as well as a field trip request form, and this phase of the objective

would be considered completed if a minimum of 30 requests for support of career education related field trips were received. The Program Consultant and Coordinator were to develop and distribute to the entire faculty information on developing learning packets resulting in six such packets being produced and distributed.

Evaluation. A copy of the WOW Field Trip Request form, including the brief explanation of field trip philosophy, is included in Appendix F. The forms are clear and concise, and contain information for both administrative (dates, times, places) and program (objectives, report feedback) accountability. A total of 33 field trips were sponsored by World of Work this year and records are on file for each in the WOW office. In interviews teachers and administrators alike thought the process for requesting such trips was well thought out and expedient. Letters from most teachers and students after the trip provided a high degree of feedback on their effectiveness as a tool for disseminating occupational/career information. One teacher noted that "as a result of a WOW sponsored field trip to Logan Airport his students had identified over 180 related careers" an experience difficult to match in the normal classroom. Most field trips were also disseminated in periodic WOW Newsletters.

Six learning packets were developed by teachers in the district that related to various career areas including: Oceanography, Business Education, Business Mathematics, and Bee Keeping. Individual abstracts for each packet were not developed although the packets were described in the WOW Newsletter.

Procedures for the development of learning packets by teachers were mailed to all administrators and teachers

and the WOW Notebook also stated that money was available for such purposes. The main reason given for the limited teacher response was "limited time available for such extra activities" and the fact that programmatically there was no large emphasis placed on this particular element.

PROGRAM OBJECTIVE II - WORK STUDY

Objective. *The Work Experience Program will offer 11th and 12th grade students at ConVal High School an opportunity to integrate into their course outline, on-the-job training experience.*

Summary of Prescribed Activities. The Cooperative Education Coordinator will use a variety of techniques throughout the school year to make students aware of the availability of this program. He will also be responsible for contacting potential employers in business and industry for their cooperation in the program. In conjunction with the employer individualized training plans and quarterly evaluation forms will be developed and completed.

Evaluation. In order to avoid possible confusion, a clarification of the difference between work experience and work study programs may be necessary. In the work experience program basically, a student has an individual training plan or profile, a set of objectives to be completed in a year, he is salaried, receives one credit per year and must work a minimum of fifteen hours per week on a release time basis. Program participants usually are juniors and seniors. The work study program is also release time but carries no credit, no minimal hours and no individual training plan. The fundamental thrust is economic and the jobs are for the most part the same as those for work experience. Whether a student is work study or work experience depends on what his/her goals are and their class schedule.

Work Study/Work Experience themselves do not appear in the school catalog. Instead, they are described under the heading Diversified Occupations. The Cooperative Education Coordinator did not see this as a serious problem, and of the students interviewed, none learned of the programs through reading the catalog. It should be noted that personal conferences between students and the Cooperative Education (CE) Coordinator occur frequently, exhibit an air of ease of communication and rapport and, on the surface at least, have a minimum of formal structure to them. The CE Coordinator has on occasion submitted articles to the newspaper, mainly requesting participation from employers rather than using it extensively as a public relations vehicle.

Most of the students seemed to have learned of the programs from friends or the program orientation at the beginning of the school year. None of the students interviewed were referred to the programs by the guidance department. However, bi-weekly meetings are held between the CE Coordinator and the Vocational Guidance Counselor and some students interviewed; all indicated that they had improved significantly as a result of their participation in either the work study or work experience program.

The Cooperative Education Coordinator has contacted and enrolled approximately fifty employers in the program and ninety out of seven hundred students in the ConVal High

School. A sample of work experience activities include:

ball bearing industry	highway maintenance
hospital custodian	small business (student-operated garage)
estate maintenance	mason
garage (several)	sound technician (movies)
carpenter	electronic technician
electrician (residential)	secretary
plumber	cook
grocery store	landscaping
restaurant	

The CE Coordinator developed, in cooperation with WOW staff and participating employers (a) 7-10 individual training profiles for specific occupations, (b) a Parent/ Employer Release Form for Work Experience and transportation form, (c) Work Experience Training Agreement, which among other things, outlines responsibilities of the student, parent, teacher, coordinator, school and training sponsor, and (d) a Supervisor's Rating Chart. Copies of all forms are included in Appendix G.

PROGRAM OBJECTIVE - COOPERATIVE EDUCATION TEACHER/COORDINATOR

Objective. *A Cooperative Education Teacher -- Coordinator will be responsible for designing and implementing Work Study/Work Experience and "Commonalities Programs."*

Summary of Prescribed Activities. The CE Coordinator, in cooperation with the Project WOW staff,will prepare a job description for himself. He will also prepare training profiles and place 25 students in grades 9-12 into community work experiences (credit) and 50 students in the same grades in work study experiences (noncredit). A pre-post test format and employer questionnaire will be developed and administered

to determine that students have increased their awareness and intent in target vocations. The CE Coordinator will also prepare and teach a course in "Commonalities" to all 11-12 grade vocational students. Students will demonstrate measurable progress with regard to their awareness and interests "common" to all vocations and careers.

Evaluation. A copy of the Cooperative Education Coordinator's job description,as well as job descriptions for other members of Project World of Work is included in Appendix C.

Although over ninety students were placed in work experience/work study programs this year, no apparent baseline data was gathered that would indicate increased awareness/ interest in target vocations on the part of students and no employer questionnaire was developed.

Commonalities or Life and Career Planning was a required course for all students in the Vocational Education program. Its primary focus was an attempt to provide a transition between school and commerce or world of work. It emphasized those areas common to most occupations (fringe benefits, wage laws, taxes, etc.) as well as ways of obtaining and evaluating jobs and was offered for two mods once a week.

Two of the students participating in the work study/ work experience program indicated they did not know they were supposed to be in the course; the others were in the

course, but also already activity-involved in "the world of work." Most felt the course was beneficial but some areas overlapped or duplicated what was offered in other courses (taxes, social security, etc.).

PROGRAM OBJECTIVE III -
VOCATIONAL GUIDANCE-CAREER INFORMATION CENTER

Objective. *Before the termination of the WOW project, the vocational guidance counselor, assisted by the IMC coordinator, will develop guidelines for a career information center at ConVal Regional High School.*

Summary of Prescribed Activities. The Vocational Guidance Counselor will obtain career information materials consistent with the vocational programs offered at ConVal Regional. A sound-slide presentation describing the career information center materials and how they are filed will be developed along with a card file on career materials. Each card will contain the title of the occupation, DOT number, where the career information is stored, and in what form--i.e., pamphlet, filmstrip. The occupations will be listed in alphabetical order under one of the 15 occupation clusters.

Evaluation. A sound-slide presentation is available for the ConVal Vocational Education Program, but not for career education as such. A sound-slide presentation on the career information center is planned but has not been completed to date. A bibliography of career/occupational materials available was reviewed by the evaluator. The materials are in several media: tapes, pamphlets, books, films, slides, etc. They represent a broad cross-section of careers/occupations. A copy of the proposal for the creation of a career/vocational information center is included in Appendix H. Materials from

this center and the district media center will be housed in the same area, thus providing ready access to a number of schools. Career materials have been cataloged in a card file in the Vocational Guidance Director's office and were examined by the evaluator.

PROGRAM OBJECTIVE - VOCATIONAL GUIDANCE AND CAREER PLANNING

Objective. *The vocational guidance counselor will define and design a coordinated school career/vocational guidance program for ConVal, acceptable to school board and administration.*

Summary of Prescribed Activities. By May, 1973, the Vocational Guidance Counselor will, with appropriate technical assistance and in coordination with other district guidance personnel, develop and have prepared for implementation and as a product for dissemination and diffusion, a model of clearly defined performance objectives for the development of a well integrated and coordinated school career/vocational guidance program.

Evaluation. This particular objective is still pretty much in a planning stage although a first draft copy of performance objectives and program goals have been developed. The Vocational Guidance Director hopes to have a completed draft ready for submission to the school board by August.

A group guidance activity is being developed for grades 9-10 to parallel the existing commonalities course for 11-12 grades and video taping is being done for the career information center.

FOLLOW-UP SYSTEM

GOAL - To provide a means of gathering two types of information of value to the school:

A. Information on the kinds of occupational, educational, and training opportunities which former pupils have pursued and found desirable.

B. Information which allows us to appraise and evaluate the experiences which former pupils had while in school.

VOCATIONAL ORIENTATION PROGRAMS

GOAL - To organize and conduct articulation and orientation programs on vocational education for the purpose of:

A. Aiding the pupils' personal and social adjustment to a new environment.

B. Giving pupils and parents general information about school personnel, activities, facilities, courses, and curricula.

STUDENT PERFORMANCE RECORD SYSTEM

GOAL - To develop a system of data collection to be used in assessing individual programs and to supplement the report card system presently used at ConVal Regional High School.

ASSESSMENT OF THE NEEDS OF EXCEPTIONAL STUDENTS

GOAL - To identify exceptional students enrolled in Grades 9-12 having special needs in the areas of physical, emotional and /or mental capabilities.

DEVELOPMENT AND ADMINISTRATION OF A SCHOOL-WIDE TESTING PROGRAM

GOAL - Established a school-wide testing program to aid in the following decisions-classification, evaluation, self-awareness and selection.

CAREER INFORMATION CENTER

GOAL - To establish a center for career information materials and a dissemination strategy for the effective use of this information by those within the school, who influence the career exploration and decision-making of students.

JOB PLACEMENT

GOAL - To enable vocational students to make a planned transition from school to the world of work through effective placement of students in the labor market--in a real sense, the end product of readiness for vocational planning.

SUMMARY OF
FINDINGS AND RECOMMENDATIONS

MANAGEMENT OBJECTIVES

OBJECTIVE I - DESK STUDY

Comments and Recommendations:

- An in-depth desk study was conducted by the Project Coordinator shortly after assuming his position and resulted in the development of an in-house document, Project Status Report. As could be expected, many problems cited in the report were later clarified as having been corrected. The advantage to this activity was that it brought those parties most directly involved with Project WOW (district administration, project staff, school administrators/teachers) together for a clarification of the issues raised and cleared the way for any subsequent modifications in the last year of program operation.

- A needs assessment at this time seems inappropriate. However, if consideration is being given by elements of WOW, a limited needs assessment focusing specifically on those elements might prove informative.

- Although the numerous changes in project staff (two directors, three project coordinators, two resource teachers) did not cripple the project, it could not help but hinder efficient program function and a smooth continuum over the three years. Staffing is a delicate process;and while no one can predict

what shifts will occur over the years in project administration, other programs should take note of WOW's experience and attempt to compensate.

- As was noted in the introduction,evaluation is a valuable management tool, even retrospective evaluation. No report was forthcoming for FY70 and the EPIC report for FY72 was so late that its recommendations could not be considered possible program modifications. Tighter control over evaluation procedures (internal and external) and reports is needed if maximum usage is to be made of this activity.

- While it is true the first two years of a project are not oriented toward dissemination, the third year definitely is. FY73 saw the development of a very professional Newsletter, staff presentation and continuation of prior dissemination efforts--i.e., ERIC, newspaper articles.

- No formal Advisory and Executive Boards for community/school feedback were established. Previous experience has shown that such Boards can increase local support for innovative programs as well as lead to local pick up once federal/state monies expire. North Country Education Services (Gorham, New Hampshire) model might be useful in this respect.

- Ms. Gladys Nielsen, ConVal IMC Director, has for the past two years been in the process of up-dating and completing an inventory of Project WOW materials and equipment. The inventory now consists of brand name and cost taken from the

purchase order but should be expanded to include serial numbers in case the school district already owns similar brand materials. Each piece of equipment should be clearly marked as having been purchased with federal funds by Project WOW. This will eliminate a great deal of confusion should these items be reclaimed at a later date for another federal project.

- Given the problems cited earlier in the report regarding fiscal procedures, the project staff and district administration still succeeded, not only in clarifying fiscal procedures, but also were praised by USOE for the comprehensiveness of their budget/accounting procedures.

OBJECTIVE II - DEVELOPMENT OF GOALS AND OBJECTIVES

Comments and Recommendations:

- The development of objectives and activities for the entire Project WOW FY72 were not met on schedule due primarily to the need to reassess the thrust of project efforts for the final operational year.

- While most of the goals and objectives for FY72 were well developed and contained performance criteria, there appears to be a need to focus more on student impact. No baseline data from FY70 and 72 related to student changes in attitude, academic performance, etc., was available. A limited study by vocational guidance staff on a sample of students over a

two- to three-year period might provide valuable data to justify continued local support to such WOW elements as work experience.

OBJECTIVE III - BUDGET

Comments and Recommendations:

- Documented revisions proposed by the Coordinator shifted monies to more realistically meet FY72 project needs. In addition to the school district's fiscal accountability system, an on-going week-by-week "obligated vs. expended" system was set up by the project for internal monitoring.

OBJECTIVE IV - FISCAL PROCEDURES

Comments and Recommendations:

- Although procedures for improving fiscal management of innovative projects such as WOW can be and were recommended, district procedures for the management of the entire school district take precedence.

- The district administrative office did cooperate in attempts to rectify any fiscal management problems by making its budget accounting personnel available for consultation and authorizing additional clerical staff for the project.

OBJECTIVE V - EVALUATION

Comments and Recommendations:

- No major problems resulted from evaluation contract modifications. A detailed contract with time/task schedule, man-days, costs, etc., was approved by Project WOW in December, 1972.

OBJECTIVE VI - TIME SEQUENCE CHART

Comments and Recommendations:

- A detailed time sequence chart of FY73 project activities was developed by the staff for internal monitoring of the project. Absent from this chart were the work study/work experience component and the vocational guidance component, obviously diluting its value as a total management tool. The chart was posted so members of the staff could monitor their own task requirements and the project as a whole.

- Though it did not create a problem for Project WOW, any organizational structure which shares personnel with another organization (Cooperative Education/Vocational Guidance) must clearly define roles, responsibilities and lines of communication/authority.

OBJECTIVE VII - JOB DESCRIPTIONS

Comments and Recommendations:

- Early implementation of this objective could have provided more stimulus for integrating roles and responsibilities for FY72.

- Descriptions and guidelines of responsibilities for all part-time and volunteer personnel should have been included.

OBJECTIVE VIII - DISSEMINATION

Comments and Recommendations:

- Project WOW was successfully disseminated through a number of activities including a WOW Notebook, Newsletters, newspaper

articles (CHRISTIAN SCIENCE MONITOR), ERIC, and personal presentations to professional/civic groups.

- Dissemination can be an expensive and time consuming process; however, the dividends can more than offset the costs. Efforts should be made at the local level to keep the public informed about those elements of WOW that the district continues to support and integrate within the existing school system.

OBJECTIVE IX - NEEDS ASSESSMENT

Comments and Recommendations:

- See Objective I.

OBJECTIVE X - INVENTORY

Comments and Recommendations:

- See Objective I.

OBJECTIVE XI - PHASE-OUT

Comments and Recommendations:

- Since ConVal Project World of Work is the first in this series to be completed and terminated, it is understandable that certain technical difficulties may arise preventing the project from meeting stated phase-out dates. After discussions with Mr. Cardoza, Project Field Officer for USOE, no serious obstacles appear to exist.

- Mr. Cardoza has been asked for a letter clarifying the status of materials/equipment purchased urder the WOW grant. This

will ensure the district that if certain materials are recalled, it won't be done before replacements can be put into the school district's budget.

OBJECTIVE XII - STAFF DEVELOPMENT

Comments and Recommendations:

- The weekly workshops for elementary school teachers primarily focused on woodcraft. While other craft areas might have been explored,this particular area reflected teacher preference.

- One administrator who participated in the field trip to Syracuse's career/vocational education program commented "I only regret I didn't get to go sooner, my whole attitude and motivation toward the program would have become more supportive sooner."

- Teachers/administrators of the schools in the district had only accolades for this year's project staff, with such comments as:

> "Excellent field trips - rational and well thought out."
>
> "WOW staff did a first rate, top-notch job down the line."
>
> "The staff always had time for you and did things with a smile."

PROGRAM OBJECTIVES

OBJECTIVE I - INDUSTRIOLOGY

Comments and Recommendations:

- The packages developed during FY73 by the Program Consultant and teachers are extremely well designed, and they deserve

special recognition for the quality of their work. Interviews with teachers/administrators substantiate this fact. They indicate that the packages are receiving a great deal of use in the classroom. One suggestion was made that the packets focus more on local industry and resources.

- Each of the three industriology packets developed are excellent models for future efforts in this area and the evaluator feels the district should continue to encourage teachers in the development of such materials.

- Industriology as a concept and as an alternative to industrial arts seems to be well understood and accepted by the administrators/teachers interviewed. Certain problems do exist, however:

  A. Some teachers feel they are still discriminated against because they are in industrial arts/vocational education and are not involved enough in curriculum development.

  B. Teachers insist they need money in their budgets for field trips and materials if they are to continue development in this area.

  C. Some wish more communication existed between high school and elementary teachers in order to facilitate the development of additional industriology packages.

- Some elementary school administrators commented that their teachers were interested and aware of Project WOW materials but that time prohibited their taking advantage of them. Others saw no major effort to sway other teachers toward WOW

goals and objectives, but rather concentrate efforts on those teacher/administrators who were already committed.

- Field trips were described as very beneficial with one teacher pointing out that his class had identified 180 different careers during a WOW field trip to Logan Airport.

OBJECTIVE II - WORK STUDY/WORK EXPERIENCE

Comments and Recommendations:

- The Cooperative Education Coordinator is one of those rare educators who can combine informality with his students with a high degree of professionalism. Rapport between "Mr. Mac" and the students involved in these programs is extremely high.

- Administratively, the work contracts, supervision, individual work plans, etc., are well thought out and maintained.

- Pre-post testing of changes in student attitude and achievement was not done but should be on some level to provide substantiation to what apparently is happening in these programs. (Students interviewed suggested their attitudes/grades had improved significantly as a result of the programs). It is the evaluator's opinion that the present CE Coordinator not be responsible for this task but rather that it might best be accomplished through the vocational guidance department.

- Students said they enjoyed the "commonalities" course but that in some areas it duplicated what other courses offered. It is also questionable if a course designed to assist students "in the transition from school to the world of work" should be required of students already functioning in the world of work.

- A new outline for commonalities or Life and Career Planning has been developed by the Project WOW Coordinator and staff.

OBJECTIVE III - VOCATIONAL GUIDANCE

Comments and Recommendations:

- Plans have been developed for a Career Information Center at ConVal, and this evaluator feels that the center's cataloging and distribution techniques should be compatible with the district IMC to encourage maximum usage.
- An abundance of career/vocational information has been acquired in a variety of forms and builds a strong foundation for further development in this area.

- Some activities, such as the sound-slide career education presentation, are still in the development state but appear to be progressing.

- The goals and objectives for a Career/Vocational Guidance Program are in first draft form and should be ready for school board approval by August.

APPENDIX

APPENDIX A

WORLD OF WORK

Goals & Objectives

MANAGEMENT OBJECTIVES

I. Internal Formative Evaluation:

By October 15, 1972 the WOW project coordinator shall conduct interviews and a desk study of prior project data.

Activity 1 - An assessment of the current project status will be conducted, culminating the preparation of a report of findings; realistic management and program objectives will be formulated and meetings held with key staff personnel to clarify operational conditions and share project expectations

Measured of Effectiveness

- Copy of Report of Findings
- List of personnel report was distributed to
- Notes/Summaries of staff discussions

II. Development of Goals & Objectives:

By November 1, 1972 the project staff, in coordination with the evaluator, will have formulated measurable performance objectives for management and program components of WOW for FY 72-73.

Activity 1 - Evaluator and project coordinator will review and modify existing project objectives:

Activity 3 - Project coordinator will develop a process for periodic review of budget on an obligation/ expenditure basis.

Measure of Effectiveness

- Budget status reports
- Visual devices (graphs-charts) depicting budget flow

IV Fiscal Procedures:

By November 30, 1972, the coordinator, appropriate staff, and representatives of the school district administration shall have conducted a review of the district fiscal procedures as they relate to the conduct of externally funded innovative programs

Activity 1 - The project coordinator will prepare an outline of any district/project fiscal procedures inhibiting the efficient operation of WOW and recommendations for improvement

Measures of Effectiveness

- Documentation of coordinator's outline
- Interviews by external evaluator with Project staff and school district fiscal officers

V Evaluation:

By November 15, 1972, the project coordinator shall receive from the external evaluator a design, strategy and time sequence of evaluation activities that will result i an interim and final report that will clearly show levels

of achievement in meeting stated objectives and shall contain recommendations for future planning.

Activity 1 - The external evaluator shall prepare an audit evaluation design and contract including time/task pert chart, payment schedule and any other technical design data required by WOW project coordinator and/or federal representatives

Measures of Effectiveness

- Documentation of evaluation design and contract
- Acceptance of evaluation design and contract by project coordinator and federal offices

VI Time Sequence Chart:

By November 22, 1972, the project coordinator shall have prepared a time sequence chart for management and program operation respectively.

Activity 1 - Time sequence charts for management and program objectives/activities will be developed and posted, indicating-time, resources and activities for FY 72-73.

Measures of Effectiveness

- Copy of time sequence charts

Activity 2 - Time sequence charts will be used at project staff meetings to provide clearer understanding of the total movement of the project and better definition of personnel roles and responsibilities.

Measures of Effectiveness

- Copies of minutes/summaries of such meetings

VII Job Descriptions:

Job descriptions will be prepared for each position funded by Project WOW so that all staff members will have a clear understanding of their functions and roles relative to the program.

Activity 1 - The project coordinator will prepare a one or two page abstract of job descriptions for each funded project position.

Measures of Effectiveness

- Copies of abstracts available in coordinator's office

VIII- A Dissemination:

By November 20, 1972, the project coordinator will have prepared a dissemination strategy/design that will result in the proper dissemination and diffusion of promising Project WOW practices to local, state and national target audiences.

Activity 1 - A list of target dissemination groups individuals will be prepared. The list will include, but not be limited to, 1) key community decision-makers 2) professional local educators 3) potential project resources 4) SDE personnel 5) school board members and administrators.

Measures of Effectiveness

- Copies of all charts, designs and list will will be available
- Record of verbal/written correspondence will be maintained for each member of the dissemination list

Activity 2 - Four newsletters describing specific project related activities, will be prepared and distributed to various public audiences.

Measures of Effectiveness

- Copies of each newsletter, mailing lists and records of methods of distribution will be available

Activity 3 - By March 15, 1973 a method of recording feedback from target audiences will demonstrate increased awareness and interest in the products and processes of the project.

Measures of Effectiveness

- Verbal dialogue will be recorded by date and participant(s) where feasible
- Letters or written comments regarding the project will be solicited and filed
- A scrape book of newspaper clippings will be maintained
- The outside evaluator may randomly interview recipients of dissemination materials

IX Needs Assessment

By December 15, 1972, the coordinator, with technical assistance from the project evaluators shall have prepared a design, strategy and sequential activities for the conduct of an "on going" needs assessment.

Activity 1 - Existing needs assessment activities, if any, conducted by Project WOW or the local school administration will be reviewed and abstracted by the Project coordinator and external evaluation.

Measures of Effectiveness

- Previous needs assessment studies will be available as well as any prepared summary or abstract.

Activity 2 - If necessary, a needs assessment for FY 72-73 will be designed, developed and administered to provide data for determinng future program needs

Measures of Effectiveness

- Copies of Needs Assessment available
- External evaluator will supervise development of needs assessment instrument and provide technical assistance upon request.

Activity 3 - By March 15, 1973, the coordinator shall have conducted prescribed needs assessment activities and shall have prepared an interim report for submission to the Superintendent of Schools and the Board of Education for the purposes of planning.

X Inventory:

By December 15, 1972 - the project staff shall have inventoried all the equipment and materials accumulated from July 1970 by Project WOW.

Activity 1 - A process shall be established for recataloguing all items in a manner consistent with other district projects and media/instructional centers; this activity will be conducted in conjunction with phase out plans for Project WOW, Instructional Materials Center, Project ConVal, the school district and USOE regulations.

Measures of Effectiveness

- Copies of catalogues for equipment and materials available
- External evaluator interview with school media personnel & members of Project ConVal

Activity 2 - By March 15, 1973 all clearances shall be accomplished, necessary personnel contracted, and the process shall be sufficiently in progress to insure completion by June 1, 1973.

Measures of Effectiveness

- Letters and documentation of regulations available

XI Phase Out:

By January 10, 1973, the coordinator in cooperation with representatives of school district administration

and the USOE shall have prepared a design, strategy and a check list of activities for termination of Project World of Work on June 30, 1973.

Activity 1 - A series of meetings involving project staff, school district personnel and USOE officials will be held to outline milestones in the phase out process and to develop a design and check list to ensure a smooth termination of Project WOW, June 1973.

Measures of Effectiveness

- Minutes of meetings will be filed
- Copies of correspondence and regulations will be available
- Copies of Phase-Out Plan and CheckList
- Where feasible, external evaluator will interview project staff, school district and USOE officials

Activity 2 - By March 15, 1973 a significant portion of relevant data necessary for project Phase-Out will have taken place by the project staff under the supervision of the project coordinator

Measures of Effectiveness

- Record of staff meeting
- Review by external evalutor of data collected

Activity 3 - By May 7, 1973 the accumulated data for Phase Out shall be synthesized and the process of final reporting started.

Measures of Effectiveness

- External evaluator will be consulted on process of synthesizing data
- Outline of final report format available

Activity 4 - By May 7, 1973 administrative negotiation between the school district and USOE shall have commenced and by June 7, 1973 all necessary documents and phase-out agreements shall be completed.

Measures of Effectiveness

- Documentation of correspondence and meetings.

XII. Staff Development:

By February 15, 1973, the project staff and selected school district personnel, will receive training and experience through in-service workshops, conferences and other of input related to vocational and career education.

Activity 1 - Conferences related to vocational/career education; decision-making and evaluation-dissemination will be attended by staff and district personnel

Measures of Effectiveness

- List of all conferences/workshops and participants
- External evaluator will randomly interview attendees.

Activity 2 - A series of weekly workshops in wood craft will be sponsored by Project WOW for classroom teachers.

Measures of Effectiveness

- List of participants and activities will be maintained
- Recorded comments by participants, reviewed by evaluator
- Random interviews of participants by evaluator

Activity 3 - Through these activities participants shall demonstrate broad awareness and interest in the current status of vocational and career education in our state, the region and nationally to the extent that continued planning of programs for the district shall be based upon accurate data.

Measures of Effectiveness

- Interviews of staff and district personnel by external evaluator

PROGRAM OBJECTIVES - INDUSTRIOLOGY

I. Industriology Objectives and Program Design:

By Nov.24,1972 the program consultant will develop in writing, a series of goals on the 7th grade Industriology Program.

Activity 1 - By Dec.19,1972 the program consultant will develop a program design identifying the objectives for "The Study of Industry" program

component for the 7th grade students. The program will include instructional components in (2) history and development of industry, (b) functions and implications of industry, and (c) internal organization of industry.

Measures of Effectiveness

- Copies of objectives for "The Study of Industry" component
- Review and approval by external evaluator

Activity 2 - By Nov. 24, 1972 the program consultant will develop a program design identifying the objectives for each of the four program elements on classifications of industry. The elements are (a) Raw Materials, (b) Manufacturing, (c) Distribution, and (d) Service.

Measures of Effectiveness

- Copies of objectives of 4 program elements on classification of industry
- Review and approval by external evaluator

II. Industriology Awareness:

By Apr. 10,1973 all Industrial Arts, Home Economics staff and selected administrators, departmental chairmen and other staff with develop an awareness of and interest in the Industriology program.

Activity 1 - The program consultant will distribute by April 10, 1973, written program components to each Industrial Arts and Home Economics staff member, Administrators and Department Heads;

The coordinator and program consultant will conduct a series of department meetings on industriology program development for Industrial Arts, Home Economics staff, Administrators and Department Heads and others;

Measures of Effectiveness

- Minutes of all meetings
- List of meeting participants; recipients of distributed materials
- Evaluators will develop a survey instrument incorporating Rogers Model for Change; a 70% positive response on the survey in the areas of interest and awareness of program will be considered significant.

III. Industriology Program Development:

By January 29, 1973, the program consultant will, in collaboration with three selected Industrial Arts teachers and two selected Home Economics teachers, develop a learning activity packet on the history and development of industry.

Activity 1 - The development of a learning packet in "History and Development of Industry" which will

include the following criteria: (a) performance objectives, (b) unit outline, (c) student activities, (d) teacher preparation, (e) resources, (f) time schedules, and (g) list of supply needs.

Measures of Effectiveness

- List of participating staff
- Copies of Learning package
- Interview of teachers/staff by external evaluator
- Review of learning packet by external evaluator using list of required criteria

Activity 2 - The program consultant in collaboration with three selected industrial arts teachers, develop learning activity packets on each of the four program elements on classifications of industry. The four program elements are (a) Raw Materials, (b) Manufacturing, (c) Distribution, and (d) Service. Each element will contain the following criteria; (1) performance objectives (2) unit outlines (3) student activities (4) teacher preparation (4) resources (5) time schedules and (6) list of supply needs.

IV Industriology-Elementary Program:

By June 1,1973 elementary administrators and teachers will develop an understanding of career education and its relationship to elementary classes.

Activity 1 - The coordinator and program consultant will conduct or develop an information program on career education at the elementary level and the coordinator and program consultant will acquire and distribute a variety of publications and/or program materials to all elementary staffs

Measures of Effectiveness

- Copies of distributed materials
- When surveyed by an external evaluator, 85% of participating elementary teachers will
  1) list 5 methods or techniques used to integrate career education in classroom

Activity 2 - Elementary teachers will develop a knowledge of local sources of career education materials; the coordinator, program consultant, guidance counselor will develop and distribute a list of available career education materials to all elementary teachers.

Measures of Effectiveness

- Copies of recipients/lists of materials
- When surveyed by external evaluator 85% of participating elementary teachers will identify a minimum of 10 district items from a list of 15 distinct items included on a 25 item list.

Activity 3 - By Nov. 10, 1972, a series of weekly workshops on project planning, use of tools, materials

sources and supplies, will be initiated by the program consultant and made available to all elementary staff.

Measures of Effectiveness

- List titles of weekly workshops/topics
- External evaluator will interview workshop instructor/participants

V. Field Trips:

A series of field trips related to career/vocational education will be sponsored and supported by Project WOW

Activity 1 - By Nov.4.1972 the program consultant will develop in writing a brief World of Work philosophy on a field trip request form and will distribute to each principal a written World of Work philosophy and field trip request form on WOW supported field trips.

Measures of Effectiveness

- Copy of field trip philosophy/trip request form
- List of principals receiving philosophy

Activity 2 - A minimum of 30 requests for support of career education related field trips will be made on the request form identified in Objective 2, indicating an awareness that Project World of Work will support field trips involving career education.

Measures of Effectiveness

- External Evaluator will review copies of requests
- Evaluator may interview field trip participants

Activity 3 - By May 30,1973 6 Learning Packets will be developed and abstracts of each distributed to the entire faculty.

Measures of Effectiveness

- Copies of packets and abstracts available
- List of recipients

Activity 4 - By Nov.10,1972 the program consultant and coordinator will develop and distribute to the entire faculty information on the development of learning packets.

Measures of Effectiveness

- Copies of distributed information
- List of recipients
- In a survey conducted by the evaluator 85% of the staff can demonstrate a knowledge that Project World of Work may support the development for learning packets involving career education to the extent that each knows the procedure for initiating a proposal for the development of a learning packet.

PROGRAM OBJECTIVES - WORK STUDY

I. The Work Experience Program will offer 11th and 12th grade students at ConVal High School an opportunity to integrate into their course outline, on on-the-job training experience.

Activity 1 - At the beginning of and throughout the year students will be made aware of the availability of this program through:

a. entries in the school catalogue

b. personal conferences with cooperative education coordinator

c. Local newspaper and radio broadcasts

d. student orientation at beginning of year

e. referral from guidance department

Measures of Effectiveness

- Random survey of pupils by evaluator

Activity 2 - Cooperative education coordinator will contact potential employees in business and industry to solicit their participation

Measures of Effectiveness

- List of employees contacted
- Random interview by evaluator

Activity 3 - An individualized training plan is developed by the cooperative education coordinator and the potential employer and a cooperative quarterly evaluation form completed.

Measures of Effectiveness

- Copies of sample individualized training plan
- Copies of sample quarterly evaluations
- External evaluator interviews where necessary

II A cooperative Education Teacher - Coordinator will be responsible for designing and implementing Work Study; Work Experience and "Commonalities Programs."

Activity 1 - Cooperative Education Teachers - Coordinator will create a one page Job Description Abstract outlining activities and responsibilities

Measures of Effectiveness

- Copy of Job description abstract
- Evaluator will assess coordinator activities against job description

Activity 2 - The cooperative education coordinator will prepare training profiles at the rate of one a week.

Measures of Effectiveness

- Copies of training profiles available

Activity 3 - By May, 1973, 25 students in grades 9 - 12 will be placed by the cooperative education supervisor into community work experience situations for which the student will receive credit and will measurably improve his knowledge and skills relative to the target vocation.

Measures of Effectiveness

- External evaluator survey/interview

Activity 4 - By May 1973 the cooperative education supervisor will create work study experiences (non credit) for 50 students 9 - 12 to the extent that using a pre-post test format and employer questionnaire, it shall be determined that the students have increased their awareness and interest in target vocations and shall measurably demonstrate increased skills in job performance.

Measures of Effectiveness

- External evaluator survey/interview

Activity 5 - By May 1973, all vocational students, grades 9 - 12 shall have participated in a "commonalities" course taught by the cooperative education supervisor to the end that based on appropriate evaluation instruments, students will demonstrate measurable progress with regard to their awareness and interest in issues "common" to all vocations and careers.

Measures of Effectiveness

- Curriculum outline of "Commonalities" course
- Class visitation by evaluator
- External evaluator survey/interview

VOCATIONAL GUIDANCE OBJECTIVES

I. Career Information Center:

Before the termination of the WOW project, the vocational guidance counselor, assisted by the IMC coordinator, will develop guidelines for a career information center at ConVal Regional High School

Activity 1 - The vocational guidance counselor will obtain career information materials consistant with the vocational programs offered at ConVal Regional

Measures of Effectiveness

- Copies of collected materials available

Activity 2 - The vocational guidance counselor will make a sound on-slide presentation describing the career information center materials and how they are catelogued or filed.

Measures of Effectiveness

- Review of sound-slide presentation by evaluator

Activity 3 - The vocational guidance counselor will establish a card file for career materials. A card will be made out for each occupation covered by one or several of the following types of material; pamphlets, filmstrips, briefs, and books. Each card will contain the title of the occupation, DOT number, where the career information is stored, and in what form - ex. pamphlet, filmstrip. The occupations will be listed in alphabetical order under one of the 15 occupation clusters.

Measures of Effectiveness

- Review of card file by external evaluator
- Evalutor survey/interview

II Vocational Guidance and Career Planning:

The vocational guidance councilor will define and design a coordinated school career/vocational guidance program for ConVal, acceptable to school board and administration

Activity 1 - Vocational Guidance and Career Planning: By May 1973 the Vocational Guidance Councilor will, with appropriate technical assistance and in coordination with other district guidance personnel, develop and have prepared for implementation and as a product for dissemination and diffusion, a model of clearly defined performance objectives for the development of a well integrated and coordinated school career/vocational guidance program.

Measures of Effectiveness

- Evaluator will provide technical assistance in defining measurable outcomes for objectives
- Evaluator will review and approve final program performance objectives
- Career/vocational guidance program is officially accepted and implemented.

APPENDIX B

Project World of Work 1972-73
Evaluation Design Task/Time Schedule

sk Identification and Associated Activities		Estimated Date of Task Completion
ASE I	IDENTIFICATION OF PROJECT GOALS AND DEVELOPMENT OF PROJECT OBJECTIVES	October 1, 1972 - December 15, 1972
sk I-1	Project Orientation (On-Site)	October 12, 1972
sk I-2	Development of Project Objectives*	December 15, 1972
ASE II	DESIGN/DEVELOPMENT OF EVALUATION MODEL	December 18, 1972 - January 15, 1973
sk II-1	Development of External Evaluation Design	December 22, 1972
sk II-2	Development of External Evaluation Strategy	January 15, 1973
ASE III	CONDUCT OF EXTERNAL EVALUATION OF PROJECT ADMINISTRATION OBJECTIVES	January 22, 1973 - April 1, 1973
sk III-1	On-Going External Monitoring of Activities	March 15, 1973
sk III-2	On-Site Evaluations (Multiple)	March 23, 1973
sk III-3	Preparation and Submission of Interim Report	April 13, 1973
ASE IV	CONDUCT OF EXTERNAL EVALUATION OF PROJECT PROGRAM OBJECTIVES	April 16, 1973 - June 29, 1973
sk IV-1	On-Going External Monitoring of Activities	June 1, 1973
sk IV-2	On-Site Evaluations (Multiple)	June 1, 1973
sk IV-3	Preparation and Submission of Summary Report	June 25, 1973
sk IV-4	Conduct Oral Briefing	June 29, 1973

reliminary - administration objectives finalized by December 15, 1972; program objectives inalized by April 1, 1973.

APPENDIX C

JOB DESCRIPTIONS

The following job descriptions have been developed for Project World of Work personnel.

Project Director:

(NOTE: The Director of Project World of Work is also the director of the Vocational Education Program in the ConVal School District. He therefore, divides his time between the two positions and while he is ultimately responsible for key policy and administrative decisions in the project, it is not intended that he be "prime mover".)

The Project Director will:

1. Be ultimately responsible for all major administrative and program decisions made in the project.
2. Be responsible for orienting new staff members to their roles and functions in the project.
3. Meet regularly with staff personnel on the progress and projected activities of the administrative and program elements of the project.
4. Be the prime linkage between the Superintendent's Office and the project.
5. Maintain appropriate linkages with external organizations and agencies relating to the project.
6. Represent, along with the Project Coordinator, Project World of Work at meaningful local, state and federal meetings and conferences.
7. Integrate the activities of Project World of Work with those of the Vocational Program and other similar programs occuring in the district.

Project Coordinator:

The Project Coordinator will:

1. Conduct a file search and interview for the purpose of his own orientation and in preparing a status report of the project.
2. Redefine and integrate his roles and functions with the Director and the Program Consultant.
3. Review the existing budget and recommend budgetary revisions for the purpose of bringing the project budget in line with stated objectives.
4. Prepare maaningful management objectives and oversee the preparation of objectives in the other elements of the project.
5. Contract and external third part evaluator for the project and work cooperatively with him in preparing an appropriate evaluation design and procedures.

6. Develop an appropriate dissemination strategy that will insure that target audiences are brought through the awareness and interest stages in the change process by the conclusion of the project year.
7. Will meet regularly with the project staff and other key personnel in clearing the current status of the project and decision-making on proposed activities.
8. Meet all management requirements with regard to reporting of USOE.
9. Will re-organize the inventory procedures of the project and will conclude the year with appropriate data in this regard for termination.
10. Will represent the project along with the Project Director at meaningful local state and federal meetings.
11. Will be responsible for authorizing all purchase orders and will co-sign all contractural agreements.
12. Will assist the Program Consultant in coordination and logistical arrangements for proposed workshops.
13. Prepare end of the year status report with appropriate recommendations which will include those recommendations secured from other staff members.
14. Support teachers' needs for necessary materials in accomplishing activities of the project.

Program Consultant

The Program Consultant will:

1. Through a series of meetings with the Project Director and Coordinator and other key personnel, establish his roles and functions and integrate them smoothly with the roles and functions of the Project Director and Coordinator. These roles and functions will result in his being primarily responsible for the conduct of the program elements of the project.
2. With the help of the external evaluator, prepare meaningful program objectives for the project year.
3. Assess the current status of the Industriology Program and proceed to revise, upgrade and test out the Industriology Concept before the conclusion of the year.
4. Provide consultive assistance to all teachers requesting such services or who are directly involved with the implementation of the program.

5. Coordinate all aspects of the process of developing necessary materials for upgrading and implementing the Industriology Concept.
6. Coordinate the conduct of all student field trips and other learning activities eminating from the project.
7. Work cooperatively with the Project Coordinator in the conduct of workshops and other in-service activities.
8. Maintain appropriate documentation with regard to program elements.
9. Oversee the conduct of pilot activities and programs that demonstrate the Industriology Concept.
10. Work cooperatively with the Project Coordinator in budget revisions and share in the decision making of budgetary matters relating to the program.
11. Where time and finances allow, represent the project at meaninfgul local, state and federal meetings and conferences.
12. Oversee all video taping and photographic activities relating to the project.
13. Be responsible for overseeing the ordering of all necessary materials in support of program elements of the project.
14. Share responsibility with the Project Coordinator for orienting visitors to Project World of Work.

Cooperative Education Supervisor

The Cooperative Education Supervisor will:

1. Delineate, refine and integrate his functions and roles with those of other staff members.
2. Clearly define the rationale objectives, activities and strategy for both the work study program and the work experience program.
3. Organize and conduct the "commanalities" course.
4. Develop training profiles for students entering the work experience program.
5. Maintain appropriate data relating to his activities, work cooperatively with the Vocational Guidance Counselor with regard to student placement in the work study and work experience programs.
6. Create firm linkages with business and industry in the community for the purpose of upgrading and expanding the Cooperative Education Program.
7. Counsel independently with students with their regard to their personal goals and objectives in entering the World of Work.

8. Will work cooperatively with the Project Coordinator in revising the course "Life & Career Planning".
9. Will be responsible for data collection to be used in evaluating student progress within the work study and work experience programs.
10. Will develop a procedure for the enrolement of students in the cooperative education programs.
11. Will arrange for transportation of some students to their job sites.
12. Coordinate closely with other cooperative teachers with food services, health aservices, distributive and clerical services in an effort to integrate, coordinate the total program in this school.
13. Provide the Director of Vocational Education with those news items concerning the program which may be released to the news media in an effort to build good community relationships in a successful program.
14. Expedite and instigate cooperative efforts between businesses and industry in the community with those of the school.

Vocational Guidance Counselor

(NOTE: There will be an addenda to this section for inclusion at the time of the on-site visit by Unco, Inc.)

The Vocational Guidance Counselor will:

1. Provide individual counseling of all high school students involved in the program.
2. Develop methods and procedures for keeping accurate records of student performance.
3. Develop testing procedures, conduct such tests and prepare appropriate resulting data relating to students' vocational interest and ability.
4. Seek resource materials relating to career awareness and guidance and will organize such materials to be used as an on-going resource for students of information relating to careers.
5. Create linkages with external agencies (e.g. Project OIIP) that will expand student resources relating to occupations and careers.
6. Review and revise the goals and objectives aimed at the proper integration and coordination of the guidance program at ConVal High School.
7. Work cooperatively with other staff members in identifying and meeting the needs of students with special problems relating to

career choices and/or skills development.

8. Aid students in writing resumes for educational experience.
9. Seek to upgrade his own background and knowledge with regard to career education through participation in significant local, state and federal meetings.

Project Secretary/Office Manager

The Project Secretary/Office Manager will, under the direction of the Project Coordinator and the Program Consultant:

1. Fiscal
   Be responsible for internal projects and fiscal procedures (e.g. purchase orders, budget reconcillation, federal reporting, etc.).
2. Federal Reporting
   Be responsible for quarterly reports, internal reports and final reports; also quarterly requests for funds.
3. Clerical Responsibilities
   Typing, reproducing, coallating, and dissemination of all printed data, material, memos and letters, etc. eminating from the project office.
4. Management Functions
   Oversee all clerical work delegating to other individuals contracted by the project, maintain staff schedules and coordinating appointments and meetings, maintain office files and the responsibility for all supplies and materials needed for the operation of the World of Work office.
5. Staff Development
   Attends all staff meetings, and when time and funds allow, attends local and state meetings relating to career education. (NOTE: There are several other unmentioned tasks inherent in the above responsibilities.)

WORLD OF WORK Newsletter

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[illegible] ROUTE [illegible] NORTH
PETERBOROUGH, N.H. 03458
TEL. [illegible] 924-3869

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OPPORTUNITIES FOR LEARNING.....

90

OUR NEW STUDENT SECRETARIES

Porject World of Work now has three new student secretaries. They are Ellie Nolan of Peterborough. She is a senior and formerly worked in the clothing section of Derby's Department Store. Ellie is seeking employment as a secretary after graduation in June. Joyce Durgin is a sophmore from Antrim and is also going on as a secretary for her career. Susan Rieley is from Temple and a junior and is college bound upon graduation. Susan wants to become a veterinarian, however, she feels that with some office practice she will be able to work her way through college.

Vi Despres, secretary to Project World of Work is planning a trip to NHBB in the near future in conjunction with 4 seniors and Bob Page in Drafting to view first hand, these careers in industry.

CURRICULUM DEVELOPMENT WORK ON OCEANOGRAPHY

During the week of February vacation, Paul Miller and Dave Bisel under the sponsorship of the World of Work developed a 9 week oceanography unit.

The packet included specific behavioral objectives and related activities which include two working field trips to North Hampton beach.

The program stressed marine biology with ecology as the focal point with student experiences centering on population and biotic and physical factors affecting plants and animals.

By carrying on lab and field experiences students will be able to "see" first hand what a marine biologist does.

In addition, as an integral part of this unit, students will have the opportunity and encouragement to explore careers relating to oceanography. This will be achieved by: 1) having pairs of students create "career" bulletin boards, 2) having students research 5 different occupations relating to oceanography by using the specific resources set aside in the science resource center, and 3) having students discuss oceanography and vocational opportunities with two guest speakers.

Both Paul and Dave feel that the hands-on packet appraoch to curriculum development is "the" way to do it!

PROPOSAL FOR BALANCE BEAM PROJECT

In working with students at Hancock School (2nd through 5th grades) using the WOW tool shop, I have observed that the children must see the practical value of their wood working projects. Chests, hot pads, bird feeders and doll house furniture have been made.

One 4th grader has shown certain promise in his working with wood. We have discussed the possibility of building something of high quality and permanent value to the school. A balance beam to be used by the pupils has been proposed. The student is enthusiastic as it will be his personal project using the WOW tools under my supervision.

The project requirements are the following: one 10', 2" X 4", one 6', 4" X 6". On completion of the project, plans will be submitted by the student.

Submitted By: Steven B. John

JIMI CONFERENCE HELD IN DURHAM, N.H.

Several students from Contoocook Valley Regional High, along with Vi Despres, Secretary-Office Mangager of Project World of Work, attended the JIMI Conference (Junior International Management Institute) under the auspices of the International Management Chapter of New Hampshire and the State YMCA Industrial Committee. This was held on the campus of the University of N.H. in Durham on Saturday, March 10.

The day evolved with speakers including Gov. Meldrim Thompson and panel discussions. Students were sponsored by local and area business and industries.

As a result of the JIMI Conference held in Durham, Steven Whitney, a junior at ConVal Regional High School was selected by Mr. Floyd Bailey, Industrial Arts Consultant for the State of N.H. to speak at the spring meeting of N.H. Vocational Association which will be held in Laconia. The theme of the upcoming meeting will be "Career Development and Vocational Education". Steven will be speaking with the teachers about how he took advantage of opportunities within our school and self motivation.

Submitted By: Vi Despres

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THOUGHT...

Small minds discuss people
Average minds discuss events
Great minds discuss ideas!

****

We think Bob Harkins has done an exceptionally fine job of printing up our photo pages for this newsletter. We hope you agree. Bob is also doing much of the work for the Unit Packets being developed in support of World of Work's Industriology Program.

EDITORAL COMMENT:

What is Career Education?

After a year of local, state and national meetings related to career education, it is unfortunately clear that many people are confused about just what career education is. Most people are not aware of the fact that the concept of career education suggests a whole new approach to education. That is to say that it is not a course, it is not vocational education, it is not part of the curriculum, it is a new attitude, a new approach, a new stance with regard to the very purpose of education. This concept suggests that whatever the course - be it contemporary problems, biology, foreign language, - whatever the level, be it second grade or twelfth, - whatever the abilities of the learner, there must be something in it for the student that is of personal value and will help him to determine what he will do with his life and to know what he must do to prepare for it.

The concept suggests that we must identify what makes for a successful, contented, and meaningful life and then to direct our energies toward doing what we can to give students as much guidance, experience, skills and help in those directions.

Career education suggests that we must determine the meaning and value of "work" and a "career". It should not only include a person's job, but more importantly, what he will do with his life.

The concept suggests that we should not aim at acedemic education, or vocational education, or even career

education, but that we should aim at an approach that is relevant to student needs and will allow him to function successfully in the society that he is destined to be confronted with.

Career education suggests that we need to offer students the necessary relevant input so that he may make proper decisions that are meaningful to him, as to how he will utilize his time and resources in becoming a productive member of society.

THINK ABOUT IT...

By: Victor Walton

CAREER EDUCATION LOOMS AS MAJOR PROGRAM EFFORT IN WHITE HOUSE BUDGET REQUEST

The Federal Government's thrust in career education, has been charted as a major program effort by President Nixon, and current projections are that it will gain momentum in the new budget request the White House has sent to Congress.

The new budget proposes $4 million dollars for curriculum development, much of that in the area of career education.

The National Institute of Education, now a separate agency from the Office of Education, has earmarked $15 million dollars for career education in its new budget.

Under the Nixon Administration's proposed Educational Revenue Sharing Plan, 62.5 million dollars of the $500 million dollars in grants to the states for vocational educational purposes would be earmarked for career education.

CARDBOARD CARPENTRY IN ACTION

On February 8, eighteen district teachers gathered in the careteria area of ConVal High School and were treated to a real razzle-dazzle workshop on cardboard carpentry. Joe Scandariato, a consultant with an organization called the "Learning Tree" of Hamilton Square, New Jersey was the consultant. After about a half hour of explanation in "how to do it", the participants set about designing, cutting, sawing and putting together a variety of items made from cardboard -- everything from a rocking horse to bookshelves. The collage photographs on the beginning pages of this issue give a fairly clear idea of the interest and involvement of the participants. In general, the responses indicated that the participants not only learned some viable skills, gained many new ideas, but really enjoyed themselves in the process. Project world of work followed up the workshop with a purchase of a set of special tools for cardboard carpentry and maintenance of an ample stock of cardboard for in-class projects.

Many teachers have requested that a similar workshop be arranged this spring.

PAPERMAKING DEMONSTRATION

For many weeks Bruce McPherson, Bob Harkins and Ray Rivest, in consultation with John Davy, Program Consultant for Project World of Work have been working on the development of a unit of study on "Papermaking". The unit packet being developed is of

excellent quality and is intended that it will be disseminated throughout the country to schools interested in such a unit. To introduce this unit to his own students, Bruce McPherson of the Peterborough Middle School brought together about 30 students of February 9 for an in-class demonstration of papermaking. Project World of Work staff was on hand to video tape the activity. Bruce gave an excellent demonstration beginning with woodpulp and ending with the in-class production of a bright pink sheet of 8 1/2 X 11 paper. The response of the students was enthuiastic interest and all seemed very anxious to try their hand at making paper.

The three teachers mentioned above are anxious to share this unit of study with other interested teachers. The completed unit on papermaking will be ready for dissemination shortly by Project WOW and interested teachers should be in contact with Mr. John Davy at the Project WOW office or one of the teachers mentioned above.

SANDWICHES, SANDWICHES, SANDWICHES!!!

The eighth grade Home Economics Class traveled to Stoneham, Mass. on February 12 and February 26 to visit Servomation. Two mothers and Mrs. Grace, Home Economics teacher went with each group. Servomation makes twelve thousand sandwiches each day to put into vending machines in the Boston area. They have a three week menu with 9 varieties available each day. They also produce about 22,000 donuts and 4,000 dinners each day. The three things that impressed the girls the most were the sanitary conditions, the donut making process, and the micro-wave oven for warming the hot sandwiches, and the dinners. These field trips are the beginning of an 8 week Industriology Project where the girls will learn about corporate structure and set up their own company to make grinders for 2 weeks to sell in the Peterborough Middle School cafeterias.

WOODWORKING WORKSHOPS PAY OFF

The World of Work Woodworking workshope held every Wednesday after school at ConVal High School are paying dividends back in the classroom. Mrs. Gradone and Mrs. Hyland have been regular participants. As a result, earlier in the year, their classes assembled and stained bird feeders. The pieces have been pre-cut by Mrs. Gradone and Mrs. Hyland. The classes are now in the processofof making planters. As a follow up to the construction, it is planned that the students will grow their own plants. Discussion will center around our environment and what make's things grow best in New Hampshire. In short, there will be an extensive unit on growing things.

PRINCIPALS TRAVEL TO SYRACUSE

About a month ago Don Carle, Supervising Principal at Hancock, Rich Finlaw, Principal at P.E.S. and Jim Grant, Principal at Temple were all set to travel to Syracuse to see first hand one of the countries best run career education programs. Well, the flu prevented that trip. So, providing there are no major national disasters, those three principals will try again on Monday, March 26.

Watch in our next issue for some feedback on the trip and what was learned....

Several students in the Art Classes are learning first hand about are vocations.

Last year Steven Whitney did a class assignment in symnography, a design form worked out in line with string or wire and tacks on a wood base. He became so interested in this he was soon designing more on a much larger and far more complex scale. He used brass, aluminum, and copper wire of varying weights to achieve unique sculptures which he was soon asked to exhibit in shops and art shows. To date he has made twenty-eight of these and sold eighteen at a professional level. When necessary to complete a commission on time he employs another boy to help assemble the design he has created. He is fast learning the problems of an artist in exhibiting, pricing his work, selling it, and attaining a professional attitude and improving his art.

Serigraph, or silk screen, printing is both a trade and a fine art. Commercial and fine art aspects have been of interest to Art 2 students this year under Mrs. Brockett who was formerly employed in a Graphics Studio. As one result, Mark Cole is now setting up a small shop in his home.

Art 1 students have been learning lettering skills using visual spacing to a point where some students are capable of doing commercially acceptable sign lettering.

Art 2 has begun a short unit on Industrial Drawing for a "How-To-Do-It" handbook.

Submitted By: Barbara Arnold

Dear Vic,

I want to tell you about the very successful field trip that grades 4 , 5, and 6 of Pierce School, Bennington took to Keene last Monday.

The plans had originally started out to be a field trip to the Keene Post Office as culmination of our units in Grades 4 & 5 on letter writing and the Post Office. However, as I wanted to be sure to get our money's worth for the price of the bus trip, additional career opportunities were explored.

As Keene is the area postal distribution point, the students saw bags and bags of mail being processed. It was cute to see each child find his corresponding post office box in the lobby. The hour tour went very fast because of all of the things to see and ask about.

A stop was made at Keene I.G.A. Store where ww saw meat being packaged and marked; an enjoyable visit with their baker in their bakery section. We saw fruit and vegetables getting ready for the store; the storage areaa; and a walk around the store itself.

Then, next door to Grant's where two managers gave us a pleasant and very informative tour of their store and large stock room.

After a Dutch Treat lunch at Mac Donalds, with full tummies, (we completely cleaned them out of the Apple Pie Turnovers) we went to the Rokon Trail Breaker Shop on Emerald Street. Here a couple of the most enthusastic men told us about their product; showed us a movie and gave us a thorough tour of their plant. Needless to say, there were many questions from girls as well as the boys. Each of us left with hopes of someday owning one of their bikes.

On the way back to Bennington, we had a busload of happy children and adults who had spent a busy and successful day in Keene seeing countless job opportunities in pleasant surroundings. We were all extremely impressed by the kind attention we were given an all of the places we went.

On behalf of the students and other adults, I wish to thank yku, John, and the World of Work for giving us such a happy day.

Sincerely,

Ginny Young

CARDBOARD CARPENTRY WORKSHOP

As I stated to both of you at the conclusion of the workshop, I was superpleased. The opportunity to attend was greatly appreciated.

Both myself and my staff at Pierce School had a wonderful time, and more importantly left with many exciting ideas to try out.

The workshop was conducted in a very professional manner, which in turn allowed all participants a maximum amount of time for actual construction of material.

I must re-state that I was very pleased with the workshop from beginning to end.

Maurice LeFlem

P.S. Even the meal was good!

"There is no child who because of his I.Q. should be sentenced to college or excused from work".

Dr. Kenneth B. Hoyt

"NATIONAL VOCATIONAL EDUCATION WEEK"

In observanee of "National Vocational Education Week", Charlie Pieterse along with Project World of Work, the Industrial Arts and Home Economics Departments held an Open House on February 15th. Also distributed that evening, were forms to fill out and returned to Charlie Pieterse concerning evening school to begin shortly. Courses included but not limited to were: Wood Working and Furniture Making, Arts & Crafts, Electronics, Drafting, General Metal, Typing, Home Making, Business Math, English or others if there was enough request for it. There is still time to sign up for these courses!

The turnout for the Open House event was favoarble and all enjoyed the event.

Submitted By: Charlie Pieterse

OUR NEW CONTACT AND PROPOSED COOPERATIVE EFFORT WITH N.H. BALL BEARINGS, INC.

The Vocational Department and NHBB, Inc. are in the beginning stages of discussion which may well lead to the institution of a metal training program on the apprenticeship level.

No matter what kind of program eventually develops as a result of these talks, students at ConVal are sure to benefit.

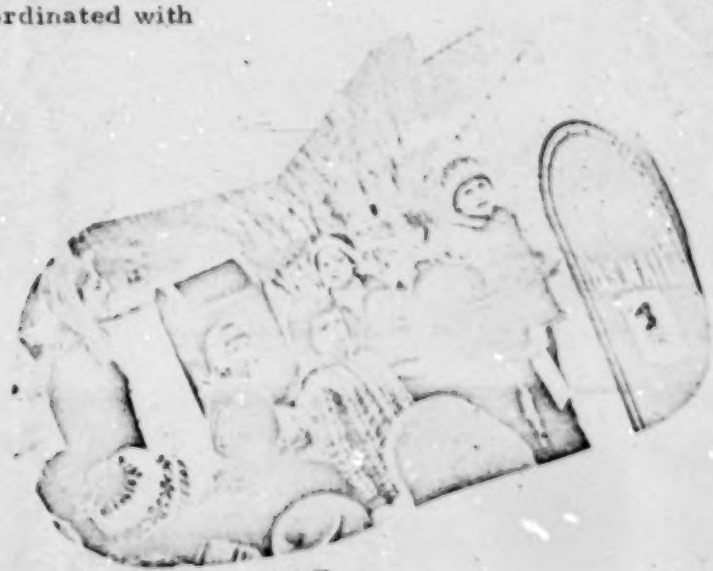
Watch for further details....

C. R. Pieterse

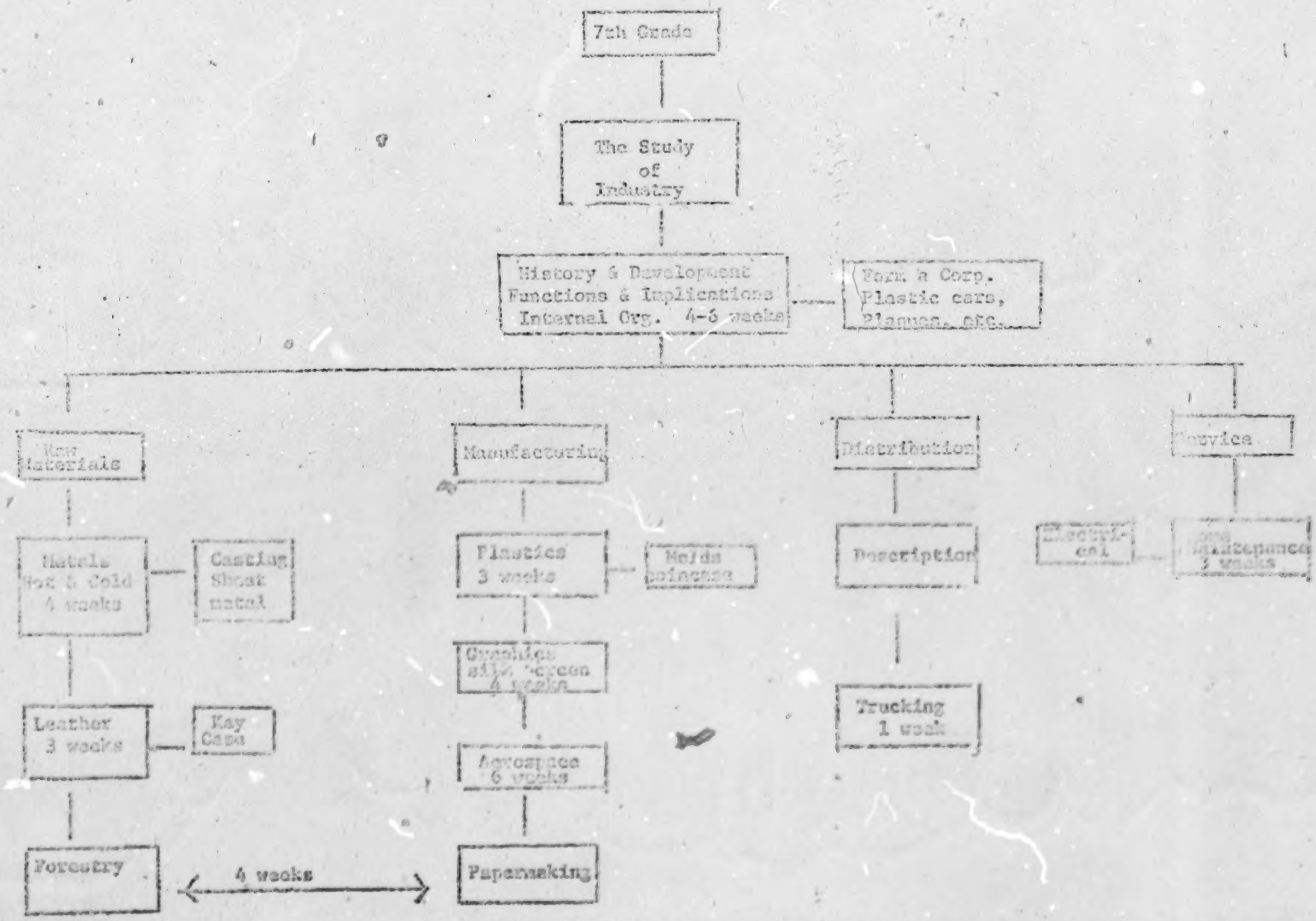
P.E.S. STUDENTS HIT THE ROAD

Students from Peterborough Elementary School visited an apple orchard

in Jaffrey where they saw cider being made. The students got to taste the cider and dnjoyed some donuts. In February they visited the Post Office where they learned how the mail travels, where and how mail is sorted and some first hand information about what it is like to be a postman. As a follow up to that experience, the students have made a post office in the hallway, and writing letters has become a daily activity. There is a mailman at the end of the day who delivers the mail. The classes are now beginning to start a pen-pal program with a school in New Ipswich, Mass. Last week Mrs. Hyland's class went in small groups to Field's Market. They were introduced to many new aspects of the grocery u usiness. They saw how hamburger is ground up, how meat is cut, how forzen foods are stored, how a stock room is organized, how items are weighed in the produce department, how coffee is ground, how a cash register operates. It was carefully explained to the students how and why it is so important to keep accurate records in the grocery business. Mrs. Hyland's students are now in the process of building their own grocery store in the school. They will have a manager, butcher, a stock boy and clerk on a rotating basis. This activity will be coordinated with the math unit on money.



APPENDIX E


7th Grade
The Study of Industry
History & Development Functions & Implications Internal Org. 4-6 weeks
Form a Corp. Plastic cars, Planner, etc.
Raw Materials
Manufacturing
Distribution
Service
Metals Hot & Cold 4 weeks
Casting Sheet metal
Plastics 3 weeks
Molds Coinage
Description
Electrical
Auto Maintenance 3 weeks
Graphics silk screen 4 weeks
Trucking 1 week
Leather 3 weeks
Key Cards
Aerospace 6 weeks
Forestry
4 weeks
Papermaking

APPENDIX F

FIELD TRIP REQUEST
Project World of Work

OVERVIEW:

Project World of Work is continuing to sponsor considerable field trip activities for the 1972-73 school year that are career education oriented.

Since one of our goals is to develop an expanded awareness, interest and personal evaluation by students, teachers, and administrators of careers and vocations through field trips and other allied learning experiences, we would like you to fill our and return a field trip form (availalbe through your principal or through the World of Work office.)

Remember:

1. Your objectives should be consistent with the previously stated goal.

2. Class activities should have reinforced or provided support for this field trip.

3. Please follow-up with a one-page summary of student learning experiences during the field trip. Try to include student reactions, high interest areas, etc.

PROCEDURE:

1. Fill out Field Trip Request Form and retain top copy.

2. Remaining three copies are to be mailed to Project World of Work c/o ConVal Regional High School, Route 202 North, Peterborough, New Hampshire: Attention - John Davy

PROJECT WORLD OF WORK WILL:

1. Return one application form with Request Approved or Request Not Approved.

2. Mail one copy to Bus company.

3. Retain one copy for records.

FIELD TRIP REQUEST FORM
Project World of Work

Destination of field trip:

Name of place _____

Street Address _____

City or town _____

Person you will contact _____ Tel. _____

Time you wish to arrive at destination _____

Time you wish to arrive back at school _____

Scheduled date of your field trip _____

NOTE: Please call bus company and obtain estimate and clearance on the following:

1. Can a bus be available on your scheduled date?_____
2. Where will you meet the bus? _____
3. What time will he arrive?_____
4. What is the name and address of bus company you are using?

_____

5. What is the bus company's estimated cost of this field trip?

$_____

Name of teacher responsible for this trip _____
Signature

Principal _____
Signature

Project World of Work Use Only

Request:

Approved _____
Project World of Work

Not Approved _____
Project World of Work

APPENDIX G

Student Request for Early Dismissal for Employment

I respectfully request that my school schedule be arranged to permit my working for work permit during regular closing hour of the school day.

It is my understanding that my continued employment depends upon satisfactory work in these subjects within the school and that I agree to work on any day that I do not attend school (MEANING NORMAL SCHOOL DAYS)

Date: _____ Signature of Student: _____

Approval of Parent

I understand my child's need or desire to have part-time work in the school year. It is with my approval that he or she may attend school with a shortened school day in order that he or she may have a maximum number of hours of employment.

Should this work interfere with the child's grades or the school's policy of the school will cooperate with the school in having the employment suspended or terminated.

I further understand that the school participates primarily as a coordinating agency for the benefit of the child and does not administer wage and hour laws or child labor laws.

Date: _____ Signature of Parent: _____

Acknowledgement of Employer

I hereby acknowledge Student's Name _____ as employee and understand that his or her release from school is for regular closing hour on days when a satisfactory completion of school work is maintained or for any day not an employee on days when absence from school is necessary.

I understand it is expected that his or her working schedule will be as follows:

Hour of reporting for work: _____

Name of Organization: _____

Signature of Employer: _____

Date: _____

CONTOOCOOK VALLEY SCHOOL DISTRICT

VOCATIONAL EDUCATION PROGRAM

WORK EXPERIENCE
TRAINING AGREEMENT

Student's Name _____ Birth Date _____ Age _____

Student's Address _____ Telephone _____

Name of School _____ Telephone _____

Name of Training Station _____ Telephone _____

Address of Training Station _____

Name of Training Sponsor _____ Position _____

Student's Rate of Pay $_____ per _____ for _____ hours per week.

Signatures Below indicate acceptance of the responsibilities contained in the agreement which follows; however, by mutual consent of the training sponsor and the teacher coordinator, this agreement may be terminated at any time.

_____
Date

_____
Training Sponsor

_____
Student

_____
Teacher Coordinator

_____
Parent

_____
Director of Vocational Education

RESPONSIBILITIES OF THE STUDENT:

1. The student agrees to "do an honest day's work;" he understands that the employer must profit from his labor in order to justify hiring him and providing him with this cooperative training experience.

2. The student will keep regular attendance, both in school and on the job, and cannot work on any school day that he fails to attend school. He will notify the school and employer if he is unable to report.

3. The student's employment will be terminated if he does not remain in school.

4. The student will show honesty, punctuality, courtesy, a cooperative attitude, proper health and grooming habits, good dress and a willingness to learn.

5. The student will consult the teacher coordinator about any difficulties arising at the training station.

6. The student will conform to the rules and regulations of the training station, will avoid unsafe acts, and be alert to unsafe conditions.

7. The student will furnish the teacher coordinator with all necessary information and complete all necessary reports.

8. The student will pursue faithfully his prescribed course of study and make every effort to improve himself regarding skills, knowledges and attitudes.

RESPONSIBILITIES OF THE PARENTS:

1. The parents will encourage the student to effectively carry out his duties and responsibilities.

2. The parents will share the responsibility for the conduct of the student while training in the program.

3. The parents will be responsible for the safety and conduct of the student while he is traveling between the school, the training station and home.

RESPONSIBILITIES OF THE TRAINING SPONSOR:

1. The training sponsor will endeavor to employ the student for at least the minimum number of hours each day and each week for the entire agreed training period.

2. The training sponsor will adhere to all Federal and State regulations regarding employment, child labor laws, minimum wages and other applicable regulations.

3. The training sponsor will see that the student is not allowed to remain in any one operation, job, or phase of the occupation beyond the period of time where such experience is of educational value.

4. The training sponsor will consult the teacher coordinator about any difficulties arising at the training station.

5. The training sponsor will provide experience for the student that will contribute to the attainment of the career objective.

6. The training sponsor will assist in the evaluation of the student.

7. The training sponsor will provide time for consultation with the teacher coordinator concerning the student.

8. The training sponsor will provide instructional material and occupational guidance for the student as needed and available.

9. The training sponsor makes the following stipulations:

RESPONSIBILITIES OF THE SCHOOL:

1. The school administration will employ and retain a qualified teacher coordinator.

2. The school administration will allow the teacher coordinator sufficient time to provide the related instruction and to carry on necessary coordinating activities.

RESPONSIBILITIES OF THE TEACHER COORDINATOR:

1. The teacher coordinator will coordinate related classroom instruction and on-the-job training to improve job performance and to better prepare the student for his occupational career objective.

2. The teacher coordinator will see that the necessary related classroom instruction is provided.

3. The teacher coordinator will make periodic visits as necessary to the training station to observe the student and consult with the employer and training sponsor.

4. The teacher coordinator will assist in the evaluation of the student.

5. The teacher coordinator will plan a schedule of work experiences and a course of study paralleling it which is mutually agreed upon by the training station and representatives of the school.

6. A review of wages paid the student will be made jointly by the training sponsor (employer) and the teacher coordinator at least once each semester for the purpose of determining a fair and equitable wage adjustment consistent with the student's increased ability and prevailing economic conditions.

10/31/72
/mda

JOB TITLE SERVICE STATION ATTENDANT STUDENT TRAINEE

TRAINING STATION DATE

LEARNING EXPERIENCES CHECK ITEMS COVERED	QUARTER 1	2	3	4	RELATED CLASSROOM INSTRUCTION
GENERAL					
UNDERSTANDS POLICIES AND REGULATIONS OF THE STATION					
IS AWARE OF HEALTH INSURANCE AND GENERAL INSURANCE PROGRAMS					
KNOWS ABOUT WITHHOLDING & SOC SEC					
KNOWS AND ABIDES BY SAFETY RULES.					
RECEIVING					
SIGNS RECEIVING SLIPS					
HELPS TO UNLOAD RECEIVED GOODS					
CHECKS INVOICES OF GOODS RCVD.					
DISPLAYS OR STORES MERCHANDISE					
STOCKING					
REORDERS STOCK					
UNDERSTANDS STOCK ROTATION					
KNOWS WHEN TO REORDER STOCK					
ASSISTS IN TAKING INVENTORY					
PRICING					
KNOWS WHERE TO FIND PRICES					
READS AND INTERPRETS CATALOGS					
PRICES ITEMS					
HANDLES TRADE-INS AND ALLOWANCES					

CONRAC HIGH SCHOOL

TRAINING PLAN

JOB TITLE SERVICE STATION ATTENDANT STUDENT TRAINEE

TRAINING STATION DATE

	QUARTER				RELATED CLASSROOM INSTRUCTION
	1	2	3	4	
STATION MAINTENANCE					
CLEANS AND MAINTAINS EQUIPMENT					
DISPOSES OF SPOILED OR DAMAGED MERCHANDISE OR WASTE MATERIALS					
DOES MINOR STATION REPAIRS SUCH AS LIGHT CARPENTRY, PAINTING, ETC.					
CLEANS FLOOR AREA, OFFICE, REST ROOMS, ETC.					
TAKES CARE OF WARNING BELL HOSE AND OUTSIDE AIR HOSE					
FINANCIAL					
OPERATES CASH REGISTER					
MAKES CASH TRANSACTIONS					
HANDLES CHARGE SALES					
MAKES CREDIT CARD SALES					
PRODUCT KNOWLEDGE					
TIRES, GENERAL					
OILS: GRADES, VISCOSITY (THICKNESS) USE OF ADDITIVES					
BATTERIES: SIZES, CAPACITY					
GREASES: KINDS AND USES					
FILTERS FOR GENERAL MAINTENANCE					
TYPES OF FAN BELTS.					
SEALED BEAM AND OTHER LIGHTS					
FUSES AND CIRCUIT BREAKERS					
CAR CARE PRODUCTS (WAXES, CLEANERS)					
TYPES OF ANTI-FREEZE					

CONVAL HIGH SCHOOL

TRAINING PLAN

JOB TITLE: SERVICE STATION ATTENDANT STUDENT TRAINER

EMPLOYER STATION DATE

LEARNING EXPERIENCES: DUTIES TO BE PERFORMED	QUARTER 1	2	3	4	RELATED CLASSROOM INSTRUCTION
SKILLS AND OPERATIONS					
CHANGES TIRES					
REPAIRS TIRES					
BALANCES WHEELS					
OPERATES LIFTS AND JACKS					
SERVICES BATTERIES					
CHECKS AND MAINTAINS COOLING SYSTEM					
CHANGES OIL					
INSTALLS OIL FILTERS					
LUBRICATES CHASSIS					
SERVICES AIR CLEANER					
CLEANS PCV VALVE					
REPLACES LIGHTS					
WINDSHIELD WIPERS					
FUSES					
FAN BELTS					
OPERATES GAS PUMPS					
CLEANS WINDSHIELDS					
CHECKS OIL					
CHECKS TIRES AS NECESSARY					

CONVAL HIGH SCHOOL

TRAINING PLAN

JOB TITLE _____ STUDENT TRAINEE _____

TRAINING STATION _____ DATE _____

LEARNING EXPERIENCES: CHECK ITEMS COVERED	QUARTER 1	2	3	4	RELATED CLASSROOM INSTRUCTION

WORK EXPERIENCE PROGRAM

SUPERVISOR'S RATING CHART

STUDENT-TRAINEE _____ COMPANY _____

MR. SUPERVISOR:

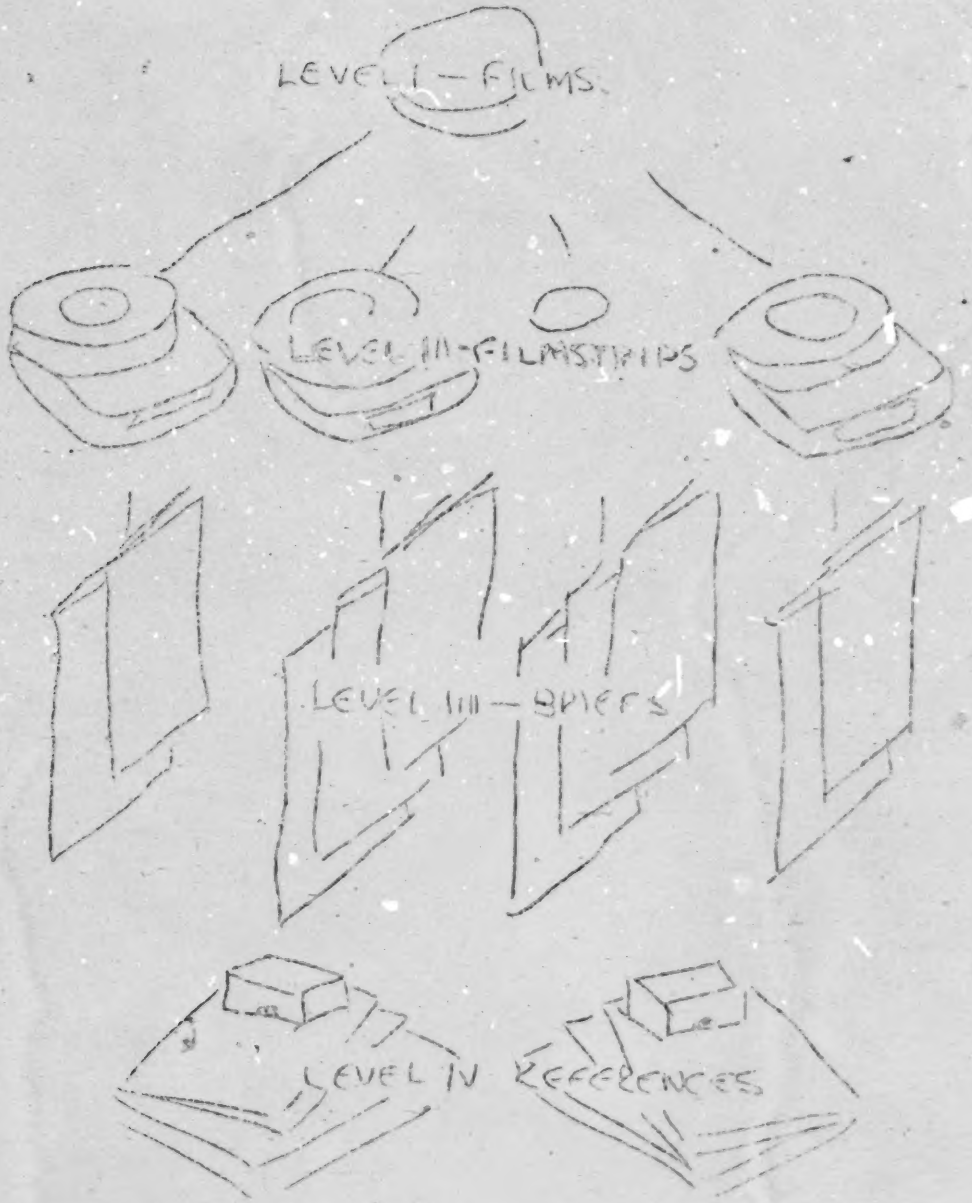
PLEASE RATE YOUR TRAINEE ON THE CHARACTERISTICS LISTED BELOW. THE FOLLOWING GRADING SYSTEM MAY BE USED: 1-SUPERIOR 2-GOOD 3-AVERAGE 4-BELOW AVERAGE

FOR SCHOOL YEAR 19____-____

		QUARTER			
		1	2	3	4
APPEARANCE	NEAT AND CLEAN (TO THE EXTENT THE JOB ALLOWS).				
ATTENDANCE	GETS TO WORK ON TIME. CALLS IF LATE OR ABSENT.				
ATTITUDE	COURTEOUS. GOOD DISPOSITION. GETS ALONG WELL WITH OTHERS.				
COOPERATION	ALWAYS WILLING TO HELP. WORKS WITHOUT BEING PUSHED.				
DEPENDABILITY	RELIABLE. DOES WHAT HE'S TOLD. COUNTED ON. TRUSTWORTHY.				
INITIATIVE	LOOKS FOR THINGS TO DO. KEEPS BUSY. DISLIKES IDLENESS.				
UNDERSTANDING	QUICK TO LEARN. SHOWS GOOD JUDGEMENT AND COMMON SENSE.				
VALUE TO AN EMPLOYER	OVERALL RATING OF TRAINEE				

COMMENTS (BACK OF FORM MAY BE USED)

CAREER INFORMATION CENTER



One of the school's most far-reaching responsibilities is helping youth with plans for career development. It is our responsibility to help not only boys and girls who are interested in their future training and careers but also those who have not developed this interest. We must provide the stimulus which will enable them to develop and appreciation for and an understanding of the world of work.

Proponents of career information giving as a function of vocational guidance subscribe essentially to a rather simple hypothesis that persons with more information about occupations and occupational environments make more adequate choices than do persons with less information.

Presently, occupational information at Contoocook Valley Regional High School is quite limited, understandably so since neither high school which merged to form Contoocook Valley had vocational guidance programs. We would also like to point out that the present student body at Contoocook Valley has had little exposure to career information and possibly are unaware of the need for such information.

To meet the objectives of making information available and stimulating students to use such information, it is essential that we set up a career information unit. This should be a multi-media, multi-level approach to career information dissemination.

Four levels of learning activity are defined as being appropriate:

Level 1 - Career information, quite general in nature would be presented at this level. Films, fieldtrips, speakers are ways of disseminating at this level and topics presented could be the interrelationship of occupations, trends in industry, etc. Activities of the student would be required viewing and discussion.

Level 2 - This would consist of more detailed information. Specific occupations could be presented through individualized audio-visual materials such as video-tapes, filmstrips, film loops, readers, micro films and operations cards. Initially the materials presented at this level would be reinforcement with the skilled trades areas being taught at Contoocook Valley. An example is that filmstrips on the various careers in the building trades supplement the building construction course at Contoocook Valley. The information is more specific and the activity of the student is increased as he has to seek out the material, set up the machines, etc.

Level 3 - This could consist of printed materials - the pamphlets or briefs giving detailed information on a particular occupation. This is the type of material that presently is the nucleus of most vocational guidance programs in New Hampshire schools. The activity or involvement of the students becomes more active as he must search out the material through an index system, must read the material himself, and in some cases, discuss it with a teacher or counselor. Other activities with this level material include sending for free information and interviewing.

and in-depth study of an occupation. Printed materials used could be the Dictionary of Occupational Titles (D.O.T.), encyclopedias of careers, guides to professions, and training courses. The activity of the student would be the same as level I but the demand on one's time and student involvement should be greater. An introduction to the D. O. T. - the classification of 35,000 jobs worldwide, makes one aware of the interrelationship of occupations and the personal qualifications necessary in the worker trait arrangement.

Having pointed out the need for such an information unit earlier, I offer the following to support the model program. A Career Information Program such as this takes into account:

1. That a great variety of personnel are involved in the dissemination of career information - parents, fellow students, neighbors, teachers, counselors.

2. That the types of information needs will vary greatly from one individual to another and from one group to another.

3. That the assimilation and digestion of career information varies greatly from one student to another.

4. That the sequence for using the information is not linear; entry to the information is by multiple paths that suit a variety of students.

5. That materials at levels one and two should stimulate student interest and motivate them to seek additional information.

6. That present facilities at Contoocook Valley are quite adequate (ideal) for [illegible] approach.

7. That materials being prepared by the New Hampshire Occupational Improvement Project, Project View and ConVal's World of Work fit into level two and three of this model.

8. That this model is flexible. It can easily include other career areas in the future, contains materials from grades 5-12 specific, can be duplicated at the Junior High and Elementary levels to form an - K program of occupational information.

9. That this information center could be beneficial to the post-graduates and non-graduates of the area.

10. That the material and application of such, could be evaluated by faculty and students.

The following materials could be used to start a career information center at ConVal. Materials could be assigned to both - guidance counselor under the direction of the Vocational Guidance Counselor. A resource center aide is available to work with these materials.

LEVEL	MATERIAL	DESCRIPTION	SOURCE
1.	Films	Rental basis	Variety
2.	Filmstrip set	A Discussion for Teachers	Bruner
		A multi-media career information system - 35 filmstrips and records	Life Builder Drive Glendale, California
2.	Filmstrip	Preparing for the Rest of the Day two parts	Guidance Associates
2.	Filmstrip	Getting and Keeping Your Job two parts	Guidance Associates
2.	Filmstrip	Preparing for the World of Work two parts	Guidance Associates
2.	Filmstrip	Job Attitudes - Key to Success	Guidance Associates
2.	Cassettes	50 c-15 - 15 minutes to a side used to duplicate Northeastern Career information tapes	A. E. Rice
2.	Film Loops	Job Opportunities 50 full color 8mm filmloops	Encyclopedia Britanica
3.	Periodical	Career Index	F.W. Faxon Company
3.	Periodical	Careers Today	F.W. Faxon Company
3.	Periodical	Occupational Outlook Quarterly	Supt. Intendent of Documents
3.	Briefs	Occupational Exploration Kit 400 occupational briefs 17 job family booklets	SRA
3.	Briefs	Chronicle Guidance Briefs up to date briefs and reprints	Chronicle Guidance
4.	Books in	Vocational Guidance Manuals in depth books that broaden career horizons	Voc. Guidance Manuals
4.	Books	Careers Encyclopedias for Technical And Specialized Careers 5 volume set reference series covering over 100 occupational fields	J.G. Ferguson Pub.
4.	Books	Encyclopedia of Careers and Vocational Guidance extensively illustrated guide to occupations information on over 600 occupations	J.G. Ferguson Pub.
4.	Books	Dictionary of Occupational Titles	U.S. Govt. Printing Office
4.	Handbook	Occupational Outlook Handbook	U.S. Labor Dept.
4.	Book	Guide to Job Careers and Professions more than 80 careers and professions covered.	Occupational Outlook Division